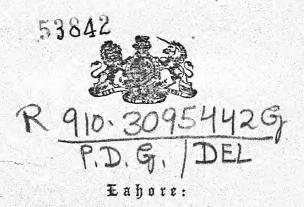


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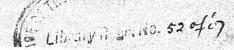
PUNJAB.

DELHI DIVISION.



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DELHI DIVISION.

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DELHI DIVISION.

Delhi Division (Dekli or Dilli).—The south-eastern Delhi Division of the Punjab, stretching along the western bank of the Jumna, and lying between 27° 39' and 31° 18' N. and 74° 29' and 77° 40' E. The Commissioner's head-quarters are at the city of Delhi, or at Simla during part of the hot weather. The total population increased from 4,232,449 in 1881 to 4,434,751 in 1891, and to 4,587,092 in 1901. The area is 15,395 square miles, and the density of population 298, compared with 209 for the Province as a whole. In 1901 Hindus numbered 71 per cent. of the population (3,252,428), while other religions included Muhammadaus 1,192,331, Sikhs 100,040, Jains 30,110, Zoroastrians 65, and Christians 12,108, of whom 3,909 were natives.

The Division includes seven Districts as shown below :--

		District.			Area.	Population (1901).	Land Reve- nue with Cesses, 1903-04, in thousands of rupees.
Hissär	445		***		5,217	781,717	9,91,
Rohtak	***		•••		1,797	630,672	11,45,
Gurgaon		***	•10		1,984	746,208	14,39,
Delhi	•••				1,290	689,039	10,19,
Karnāl	***	444	•••		3,153	883,225	12,29,
Ambāla	***		***		1,851	815,880	13,81,
Simla	***	•••	•	•••	lot	40,351	21,
		Total of D	ivision		15,393	4,587,092	72,25,

With the exception of the small District of Simla and the hill station of Kasauli in that of Ambāla, the Division lies wholly in the plains. It contains 6,486 villages and 5 t towns, the largest

DELHI DIVISION. of which are Delhi (208,575). Ambala (78,638), Bhiwani (35,917), Rewari (27,295), Panipat (26,914), Karnal (23,559) and Rohtak (20,323). The Commissioner has also political control over the Native States of Sirmūr, Kalsia, Pataudi, Dujāna and Lohāru, which have an aggregate area of 1.740 square miles and a population of 264,204. Excepting Delhi there are few towns of commercial importance, but Rewari and Ambāla may be mentioned. Pānīpat in the Karnāl District has been the scene of several famous battles. SIMLA, the seat of the Supreme Government for seven months in the year, lies in this Division.

HISSAR DISTRICT.

Boundaries, configuration and hill and river systems. Hissār District (Hisār).—A District in the Delhi Division of the Punjab, lying between 28° 36′ and 30° N. and 74° 29′ and 76° 20′ E., with an area of 5,217 square miles. It is bounded on the north by the District of Ferozepore, and by the Patiāla State; on the east by the Jind nizāmat of Jīnd State, and by the District of Rohtak; on the south by the Dādrī nizāmat of Jīnd, and the territory of the Nawāb of Lohāru; and on the south-west by Bīkaner State. Situated on the borders of the Bīkaner desert, it has in many respects the characteristics of Rājputāna rather than of the Punjab, and its general aspect is that of a plain or prairie, unbroken except by some detached peaks of the Arāvalli Range in the extreme south-west, the highest of which is Toshām hill with an elevation of 800 feet. The only river, the Ghaggar, enters the District in two branches, known as the Ghaggar and Johiya, meeting below Sirsa.

Geology.

With the exception of some small outliers of gneiss at Toshām, there is nothing of geological interest in the District, which is otherwise entirely of alluvial formation.

Botany.

The north-eastern part resembles as regards its vegetation the upper Gangetic plain, while the southern border is botanically akin to Rājputāna. The Sirsa sub-division resembles the desert and the western Punjab. The fodder grasses of the tracts round Hissār and Hānsi (largely species of Panicum and Pennisetum) are celebrated. A stunted kind of zizyphus (Z. nummularia), common in the drier tracts of Northern India, is conspicuous in this District, and its leaves are valued locally for cattle.

Fauna,

Wild animals are comparatively rare, owing to the absence of water, but antelope and ravine-deer are very common, and hog are plentiful in parts. Wolves are also fairly numerous. Nilgai are sometimes met with near Hissār.

t Hacket, Geology of the Aravali region, Records, Geol. Survey, India, xiv, part 4.

Owing to the extreme dryness of the climate the District HISSAR is healthy. Even the canal-irrigated tracts, where there DISTRICT. used to be a great deal of fever and the people presented a Climate and striking contrast to the inhabitants of the dry tracts, have temperature. been healthy since the cultivation of rice was stopped about 10 years ago. Both the heat in summer and the cold in winter are extreme, and epidemics of pneumonia are not uncommon in the winter months.

As the District lies on the edges of both the Bengal and Rainfall. Bombay monsoon currents, the most striking feature in the rainfall is its extreme variability, and the partial manner in which it is distributed. The yearly average varies from 14 inches at Sirsa to 16 at Hissar, where 14 inches fall in the summer and 2 in the winter. The greatest annual rainfall recorded during the last 20 years was 37.4 inches at Bhiwani in 1885-86, and the least 3.1 inches at Sirsa in 1899-1900.

A large part of the District is, with parts of ROHTAK, History and better known to history as HARIANA. The once fertile tract archæology. watered by the Ghaggar had its capital at Hansi, which was the ancient capital and southernmost point of the Siwalik territory, and which archæological investigations show to be one of the most ancient towns in India. The numerous architectural remains of Hindu origin, found built into the walls of Muhammadan tombs and mosques throughout the District, testify to its having been the abode of an ancient and vigorous Hindu civilization. The most interesting of these are to be found at HISSAR, HANSI, FATAHABAD and TOS-HAM. An inscription at TOSHAM seems to commemorate a victory over Ghatotkacha, the second known member of the Gupta line (circa. 305 A.D.), and it seems probable that Hansi was a stronghold of the Kushan rulers of the Punjab.

The District is said to have been overrun in the eighth century by the Tomar Rajputs, and afterwards to have fallen under the dominion of the Chauhans. In 1036 Hansi was captured by Masaud, son of Mahmud of Ghazni; but in 1043 it was retaken by the Delhi Rājā, probably a Tomar vassal of the Chauhans. After the defeat of Prithwi Raj by Muhammad of Ghor in 1192, the Jats laid siege to Hansi, but were defeated by Kutb-ud-din. Hänsithen became a fief of the Delhi kingdom. The districts of Delhi, Ajmer, Hansi and Sirsa fell into the hands of the conqueror; but no settled rule seems to have been at first established in this tract, which in the ensuing anarchy was dominated by the Jatu Raiputs, an offshoot of the Tomars. Muhammadan power was, however, gradually consolidated, and about 1254, in the reign of Mahmud Shah I, the

District, including Hānsi, Sirsa, Barwāla and Jīnd, was assigned as a fief to Ulugh Khān-i-Azam, afterwards the emperor Balban.

History and archæology.

Until the 18th century the tract remained a flourishing division of the Muhammadan empire, and SIRSA or Sarsūti was in the 14th century, according to Wassāf, one of the most important towns in Upper India. The towns of FATAHABAD and HISSAR were founded in 1352 and 1356 respectively by Fīroz Shāh III and canals dug from the Ghaggar and Jumna for their use. After the capture of Bhatner, Tīmūr marched through the District viā Sirsa, Fatahābād, Rajabpur, Ahrūni and Tohāna. It is evident from his account that these towns were wealthy and prosperous, for he took much booty in Sirsa, Fatahābād and Ahrūni and drove the Jāts of Tohāna into their sugarcane fields and jungles.

During the 18th century the country appears to have been held by Muhammadan tribes claiming Rajput origin, of whom the chief were the Johiyas round Bhatner (HANUMANGARH) and the Bhattis about Rānia, Sirsa and Fatahābād, from whom the western part of the District took its name of BHATTIANA. Bikaner annals tell of the incessant struggles of the Hindu Rajputs of that State with the Johiyas and Bhattis for the possession of Bhatner and sometimes of Sirsa; and the chronicles of Patiala are full of raids and counter-raids between the Sikh Jats and their hereditary foes, the Bhattis. On the death of Aurangzeb in 1707 we find Nawab Shah Dad Khan, a Pathan of Kasur, nāzim of the sarkār of Hissār, and under his rule, from 1707 to 1737, the people and country appear to have prospered exceedingly. He was succeeded by the Nawabs of Farrukhnagar, in Gurgaon, who ruled till 1761. But Nadir Shah ravaged the land in 1739, and with the disintegration of the Delhi empire Hissar became the scene of a sanguinary struggle between the Sikhs of the north-east, the marauding Bhattis of the north and north-west, and the imperial power of Delhi. In 1731 Ala Singh, the founder of the Patiala State, had commenced a struggle with the Bhatti chiefs of Bhatner and Fatahabad which lasted for his lifetime; the Bhattis, though supported by imperial troops, were defeated in 1754 and 1757, and Hissar was sacked in 1757 and Tohana in 1761. In the latter year Nawab Amin Khan, the Bhatti chief of Rania, was appointed nazim of Hissar, but he had no better fortune, and by 1774 Amar Singh, successor of Ala Singh, had become master of the whole of the Hansi, Hissar and Sirsa territories. On Amar Singh's death in 1781 an agreement was made whereby Hissar, Hansi, Tosham, Rohtak and Maham were assigned to the empire, Sirsa and Fatahabad to the Bhattis, and the rest of their conquests to the Sikhs, but the great famine of HISSAR 1783, which entirely devastated the District, compelled the latter to retire to their own country. The territories thus left derelict were in 1797 occupied by the adventurer George Thomas, who for three years maintained an independent kingdom in Hansi and Hissar. However in 1802, after an obstinate desence of Hansi, he surrendered to an army under Bourquin sent against him by the French general Perron, and the country was for a brief space under the Maratha dominion.

In 1803 Hissar and Sirsa, with the territories ceded by Sindhia, passed nominally to the British, but although a military post was maintained at Hānsi, and nāzims cr native superintendents placed in civil charge, little was done towards enforcing order until 1810, when an expedition was rendered necessary by the continued raids of the Bhatti chiefs. In consequence of these the territory of Fatahābād was annexed, and a second expedition in 1818 secured the rest of the territory held by the Bhattis. Thus the whole of the Sirsa tahsil was brought under British rule. Most of the present District was in 1820 included in the Western District of the Delhi territory. During the years that followed, the Sikh Rajas, taking advantage of British neglect and the waste condition of the dry tract beyond the Ghaggar, began a series of irregular colonizations, which continued uninterrupted till 1837. The British Government, after a long boundary contention with Patiala, asserted its supremacy over the dry tract, which was resumed then, and, together with the valley of the Ghaggar, made into a separate District under the name of BHATTIANA in which all the present Sirsa tahsil was included. Additions were made to the territory by other resumptions from encroaching Native States, in 1844, 1847 and 1855.

In the Mutiny of 1857 the troops at Hansi were the first to rise, followed by those at Hissar and Sirsa; all Europeans who did not fly were murdered, and Hissar and Sirsa were wholly lost for a time to British rule. The Ranghars and Pachhadas of Hissar and the Bhattis of Sirsa, followed by the majority of the Muhammadan villagers, rose in insurrection, but before Delhi had been recovered a force of Punjab levies, aided by contingents from Patiala and Bikaner, under General van Cortlandt, utterly routed them. After the Mutiny the Hissar and Bhattiana Districts were transferred from the North-Western Provinces to the Punjab, and the latter became the Sirsa District. In 1884 that District was broken up; Sirsa tahsil and 126 villages of Dabwali were transferred to Hissar; while Fazifka and the remaining 34 villages of Dabwali were

amalgamated with the Ferozepore District. The small Budhlāda tract was transferred from Karnāl to Hissār in 1889. In 1904 two villages of the District were transferred, with a cash payment of Rs. 25,000, to the Bikaner State in exchange for a few villages held by the Darbār in the Deccan.

The people.

Hissār contains 8 towns and 964 villages. Its population at each of the last three enumerations was: 1881, 672,569; 1891, 776,006; 1901, 781,717. It increased by 7 per cent. between 1891 and 1901, the low rate being chiefly due to emigration during the famine years of 1897 and 1900. The District is divided into the 5 tahsīls of Hissār, Hānsi, Bhiwānī, Fatahābād and Sirsa, the head-quarters of these being at the places from which each is named. The chief towns are the municipalities of BHIWANI, HANSI, HISSAR and SIRSA, Hissār being the head-quarters of the District.

The following table shows the distribution of population in 1901:—

		iles.	Numbe	r of—	W - 4	square	variation between	rsons able write.
Tahsil.		Area in square miles.	Towns	Villages.	Population.	Population per mile.	Percentage of variation in population between 1891 and 1901.	Number of persons to read and write
Hissār	417	810	1	134	128,783	159	+ 5'3	3,563
Hānsi	•••	799	1	132	178,933	224.0	+ 8.0	4,283
Bhiwāni 🔻	•••	750	1	131	124,429	165.9	-2.6	5,585
Fatahābād	•••	1,179	3.	261	190,921	161.0	+ 5'1	3,218
Sirsa	•••	1,651	4	306	158,651	9 6∙1	-11.3	4,722
District Total		*5,217	8	964	781,717	149'8	+'7	21,371

^{*}The only figures available for the areas of tahsils are those derived from the revenue returns, and the tahsil densities have been calculated on the areas given in the revenue returns for 1900-01. These returns do not always cover the whole of the country comprised in a tahsil, and hence the total of the tahsil areas does not agree with the District area as shown in the Census Report of 1901, in the table above and on page 2, which is the complete area as calculated by the Survey department. The tracts not included in the revenue survey are as a rule uninhabited or very sparsely populated.

Hindus number 544,799, or more than 70 per cent. of the HISSAR population, Muhammadans 202,009, and Sikhs 28,642. Owing to the large areas of sandy soil, the density of the population is The people. only 150 persons to the square mile, and even on the cultivated area it is only 194, the precarious nature of the cultivation forbidding it to support more. The vernaculars are Hariani, Bangru or Deswali in the south, Punjabi in the north, and Bāgri in the south-east. Bāgri and Hariāni run very much into one another; to a less extent Punjābi blends with Hindī and Bāgri through Pachhādi, the Punjābi of the Muhammadan Pachhādas.

Most important of the land owning tribes are the Jats, who Their castes number 195,000, and comprise one-fourth of the population. and occupa-They may roughly be divided into four classes:—the Deswali tions. Jats of Hariana, some of whose ancestors appear to have inhabited the District in ancient times; the Bagri Jats, immigrants from the Bagar country of Bikaner; the Sikh Jats of Sirsa who came from the Malwa country and from Patiala; and the Muhammadan Jāts who form part of the nondescript collection of tribes known as Pachhādas. The Deswāli and Bāgri Jats are practically all Hindus and intermarry. The Rajputs number 70,000, and form 9 per cent. of the population, 78 per cent. of them being Muhammadans. The oldest clan is the Tonwar or Tomar, who first entered the District during the ascendency of the Tomar dynasty under Anang Pal at Delhi. Other important clans are the Jatu, Bhatti, Wattu, Johiya, Chauhan, Ponwar and Rathor. As a rule the Rajput, retaining the military traditions of his ancestors, is a lazy and inefficient agriculturist, somewhat prone to cattle-stealing. The Pachhādas (30,000), as they are termed by others, are a congeries of Muhammadan tribes, many of which claim to be Rajputs, though the claim rests on but slender evidence. Their name and tradition point to their having come from the west (pachhim), and their facial type suggests a connection with the tribes of the western Punjab. They are indifferent agriculturists, lazy, improvident and sometimes cattle thieves; in physique inferior to the Deswāli and Sikh Jāts, though perhaps superior to the Bagri. The Malis, chiefly market gardeners (13,000), are entirely Hindu, the Arains (5,000) Muhammadan; Brahmans (43,000) are chiefly Gaur, Sārsut, Khāndelwāl, Dahmīa, Gujrātī, Achāri and Chamārwa in order of status. The great majority of the Gaur and Sarsut Brahmans are agriculturists, but all are fed on various occasions and venerated, though disliked. Pushkankar Brahmans from Ajmer are also found. Of the commercial classes the most important is that of the Banias (61,000), who

are divided into three sub-divisions, Agarwal, Oswal and Mahesri, who neither smoke, eat nor intermarry with each other. Of artisan and menial tribes may be noted the Ahīrs (10,000), a vagrant tribe who claim Rājput origin, the Tarkhāns (carpenters) (20,000), Lohārs or blacksmiths (10,000), Chamārs or leather workers (69,000), Dhānaks (20,000), and Chūhrās or scavengers (25,000). Of the total population of the District 72 per cent. are agricultural, and practically the whole of the rural population is dependent on agriculture.

Christian missions. Two lady missionary doctors are stationed at Bhiwāni where the Baptist Mission of Delhi maintains a girls' school. The District is also visited by missionaries of the Society for the Propagation of the Gospet from Delhi. In 1901 it contained 53 native Christians.

General agricultural conditions.

The District is divided into four natural tracts. these the Rohi of Sirsa tahsil stretches from the northern boundary to the Ghaggar. Its soil is a soft loam with a reddish tinge, interspersed with sand and clay; the water level in the wells varies from 40 to 180 feet, the crops depend entirely rainfall, and vegetation is sparse. South of the Rohi lies the western extremity of the Nali tract, stretching from east to west through the Fatahabad and Sirsa tahsils, and traversed by the Ghaggar and Johiya. Its characteristic feature is a hard iron clay soil, which permits of no cultivation until well saturated by the summer floods: here the harvest depends on inundation from the Ghaggar and Johiya, helped in some parts by well irrigation. The Bagar tract stretches from the south and south-west of Sirsa along the western border to the District, through Sirsa, Fatahābād, Hissār and Bhiwāni, gradually widening towards the south; here the prevailing features are a light sandy soil and shifting sandhills, interspersed in parts with firmer and even with loamy bottoms; the spring level is more than 100 feet below the surface, and the water frequently bitter. Practically the autumn is the only harvest sown, and that depends entirely on a sufficient rainfall. The Hariana tract stretches from the tract watered by the Ghaggar to the south-east corner of the District; it comprises the whole of Hansi and eastern portions of Fatahābād, Hissār and Bhiwāni, and is traversed by the WESTERN JUMNA CANAL. The leading feature of the tract is its firm clay soil; sandhills are found, and in low-lying parts hard clayey soil. The spring level is generally below 100 feet except in canal villages, where it rises to 30 or 40 feet. Apart from the canal tract, agriculture is practically confined to the autumn harvest. The small

jungle tract of Budhlada, 15 outlying villages in the north of Hissaw Fatal ābād tahsīl, is sometimes classed as a fifth tract, but DISTRICK, resembles the Rohi. Taking the District as a whole, only o per cent. of the cultivation is irrigated, and the rainfall is therefore of the utmost importance; on the rains of June and July depend the sowings of all the autumn crops, and on that of August and September the ripening of the autumn and the sowing of the spring crops. Until recently the autumn harvest was the mainstay of the District, but of late years, owing to the good prices obtained for wheat, the spring harvest has taken the leading place, and the best season is one in which there is heavy rain at the end of August and all through September.

The area for which details are available from the Chief agriculrevenue records of 1903-04 is 5,180 square miles, as shown tural statistics and principal below:-

Tahsīl.		Total.	Cultivated.	Irrigated.	Culturable waste.
Hissār		810	623	53	98
Hānsi	•••	799	690	180	бо
Bhiwāni	•••	750	603	6	110
Fatahābād	•••	I 179	1,300	69	165
Sirsa	•••	1,642	945	75	300
Total		5,180	4,:6r	393	733

The principal staples of the spring harvest are gram and barley, the areas under which were in 1903-04, 478 and 168 square miles respectively. Wheat covered only 100 square miles. The chief food-grain of the autumn harvest is the spiked millet, which occupied 929 square miles. Great millet comes next in importance with 38 square miles and then pulses with 175. Practically all the sugar and cotton grown is irrigated, with

four-fifths of the maize, three-fifths of the rice, and two-fifths of the wheat. No other crop is irrigated to any appreciable extent.

Improve-

The cultivation of rice has of late years been prohibited ments in agri- in canal lands, and its place argely taken by cotton. Expericultural prac- ments are being carried on chiefly with the object of introducing cotton of a longer staple. There is great room for improvement in the methods adopted by the people for utilizing the canal water at their disposal.

> Large advances are given both under the Land Improvement Loans Act for digging and clearing wells, and under the Agriculturists' Loans Act for the purchase of bullocks and seed. During the 5 years ending September 1904 a total of Rs. 73,000 was advanced under the former and 18 lakhs under the latter Act, of which Rs. 43.627 and 105 lakhs respectively were advanced during the famine year 1899-1900.

Cattle, ponies and sheep.

Hariana has been always famous for its cattle, which were the chief support of its former pastoral inhabitants. The breed is still good, though cattle-breeding is somewhat on the wane owing to the spread of cultivation. The Hissar Government cattle farm was started in 1813, and now includes 66 square miles. The pure breeds of cattle maintained are the Guirātī, Ungoli, Nagaur and Mysore, which are also crossed with Hariana cows. Of late years mule-breeding has been commenced. Large cattle fairs are held at Hissar and Sirsa, at which it is estimated that 61 lakhs come into the District annually. The camel is used in all parts for riding and carrying loads, and where the soil is light does a large part of the ploughing. The local breed of horses is in no way above the average and probably below it. The District board maintains 5 pony and 4 donkey stallions.

Irrigation.

Of the total area cultivated in 1903-04, 383 square miles or nearly o per cent., were classed as irrigated. Of this area 6 square miles were irrigated by wells and 377 by canals. addition 83 square miles or 2 per cent, are subject to inunda. tion from the Ghaggar and other streams. The Hansi branch of the WESTERN JUMNA CANAL irrigates Hānsi, Hissār and Bhiwani tahsils, while the Sirsa branch irrigates parts of Fatahābād. Hissār and Sirsa. The GHAGGAR CANALS supply part of Sirsa tahsil, and the Budhlada tract and a portion of Sirsa are watered by the SIRHIND CANAL. The area under canal irrigation increased from 120 square miles in 1891 to 377 in 1904. The area supplied by wells is insignificant, owing to the great depth to water, and the chief use of well irrigation

is to enable sowings to be made for the spring harvest. The Hissan total number of wells in use for irrigation was only 854 in DISTRICT. 1903-04, all being worked by cattle on the rope and bucket system.

The greater part of the cattle farm, known as the Hissar Forests. Bir, is a reserved forest measuring 65 square miles under the Civil Veterinary department. The income from which in 1003-04 was Rs. 4,379. The bir at Hansi is an unclassed forest under the same department. Three pieces of grazing grounds are managed by the Deputy Commissioner at Hissar, Sirsa and Hānsi for the town cattle. The total area of forest land is. reserved 65 square miles and unclassed 5 square miles. Trees have been extensively planted with the aid of canal water by the District board in and around the civil station of Hissar and the town of Hansi, and the Bir at Hansi is also being planted with trees to make a fuel reserve.

Kankar is found in many localities. Saltpetre is manufactured from saline earth in the villages and refined in the licensed refineries at Bhiwani, Hansi and Sirsa.

Minerals.

The District has no manufactures of importance; coarse Arts country cloth is made almost everywhere; and there are 10 manutaes cotton-ginning factories, 3 cotton-presses, and 3 factories where tures. ginning and pressing are combined. HANSI is the great mill centre, but 4 of the factories are at BHIWANI, and one at Narnaund, while the cotton-mills of Messrs. Chandu Lal & Co. at HISSAR are the largest in the District. These industries employed 2,061 hands in 1904. Bhiwani is known for its plain brass and bell-metal work, and for its carved doors; the District produces cotton phūlkāris embroidered with silk, which are of exceptional excellence, and embroidered woollen phūlkāris are also made. The carpenters' work is above the average.

The chief centres of trade are Bhiwani, Hansi, Hissar, Commerce, Budhiada and Sirsa on the railway, but a good deal of local trade does not pass through these places, being brought direct to the consumers by individual speculators, generally Bishnoi or Bagri Jats. Hissar and Hansi are chiefly distributing centres for local requirements, but Bhiwani and Sirsa are important as centres of through trade to Rajputana, wheat, flour, sugar and cotton goods being largely exported.

The Rewari-Bhatinda branch of the Rajputana-Malwa Railways and Railway runs through the District for 122 miles, while the roads. Southern Punjab Railway passes through Budhlada, Jakhal and Tohāna, and the Jodhpur-Bikaner Railway runs through part

of Sirsa tahsil. The District has 26 miles of metalled and 949 of unmetalled roads, of which 17 miles of metalled and 90 of unmetalled roads are under the Public Works department and the rest belong to the District board. The unmetalled roads are fit for cart traffic except in the sandy tracts, where camels are used. The Hānsi branch of the WESTERN JUMNA CANAL is navigable as far as Hānsi.

Famine.

Hissar has always been most liable to famine of all the Districts of the Punjab, owing to the fact that, while pre-eminently dependent on the autumn harvest and very little protected by irrigation, it suffers from a most capricious monsoon, while it receives the first rush of starving wanderers from Bikaner. The chālisa famine of 1782-83, as has been related, laid waste the District, and in all the famines that have since visited the Punjab, Hissar has always suffered in a pre-eminent degree. Both in 1896-97 and in 1899-1900 the whole of the unirrigated area, or 3,763 square miles, was affected. In 1896-97 the greatest number relieved on any one day was 82,505 persons, and the highest death-rate in any one week 81 per mille. In 1899-1900 the figures were 161,561 and 32 respectively. In 1896-97, 12.3 lakhs were expended and in 1899-1900, 25'7 lakhs. The severity of the famine of 1899-1900 was accentuated by the fact that the people had not recovered from the preceding famine.

District subdivisions and staff. The District is in charge of a Deputy Commissioner, assisted by three Assistant or Extra Assistant Commissioners, of whom one is in charge of the Sirsa tahsīl and sub-division. It is divided into 5 tahsīls, Sirsa, Fatahābād, Hissār, Hānsi and Bhiwāni, each of which is in charge of a tahsīldār assisted by a naib-tahsīldār. Dabwāli in Sirsa and Tohāna in Fatahābād are sub-tahsīls under naib-tahsīldārs.

Law and justice.

The Deputy Commissioner as District Magistrate is responsible for the criminal justice of the District. Civil judicial work is under a District Judge. Both officers are controlled by the Divisional Judge of Ferozepore. The District Judge has a Munsif under him at head-quarters, and there are four honorary magistrates. Cattle theft is the principal crime of the District, for which its position, surrounded as it is by Native States, affords peculiar facilities. It is practised chiefly by the Muhammadan Rājputs and Pachhādas.

Land revenue history of Hissar proper is quite distinct from mue administration. The Sirsa tahsul, which was only added to the District on the disruption of the old Sirsa District in 1884. The greater

part of Hissar was occupied by the British Government Hissar in 1810 and underwent three summary settlements for 10, 5 and 10 years, successively, between 1815 and 1840. The main feature of these assessments was a demand so high that full collections were the exception, and the frequent remissions demoralised both the revenue officials and the people. of immigrants had taken place on the establishment of settled government, and when disturbances occurred in the neighbouring Native States, Hissar formed a convenient refuge. land revenue, however, was fixed and collected with such a complete disregard of the chances of bad seasons, that when the cultivators were pressed for payment they moved off into the Native States whence they had come. The demand of the first settlement (1815-1825) was so high that it exceeded by 20 per cent, the revenue fixed in 1800 for the same villages. High though this assessment was, it was increased in the two settlements that followed, until between 1835 and 1839 the demand was 4'9 lakhs for a tract which in 1890 was assessed at only about two-thirds of that sum.

The amount fixed at the regular settlement of 1840 was 37 per cent. below the old demand. The canal villages were assessed at irrigated rates for the first time in 1839. The reduction came as a new lease of life to the impoverished land-holders, and the progress made since has be n steady. interrupted only by famine. A revised settlement was made in 1863, and resulted in a reduction of half a lakh on the last demand The second revised settlement was carried out between 1887 and 1892. Cultivation had more than doubled, while prices had risen 60 per cent. and the result was an increase of 58 per cent, to 6 lakhs. The rates varied from 3 to 8 annas an acre, exclusive of canal rates. About 90 per cent. of the tenants pay rent in cash.

The Sirsa tah-il, with the rest of the old Sirsa District. was summarily settled in 1829 and regularly in 1851. In 1881-82, the last year of the regular settlement, the demand stood at 1.4 lakhs, which was raised by the new assessment to i'o lakhs. The assessment was revised for the second time between 1901 and 1903, and a fixed assessment of 2 lakbs was announced. The area subject to the very precarious Ghaggar floods was placed under fluctuating assessment, fixed rates for the various crops grown being applied to the area actually cropped every harvest. It is estimated that the yield from this fluctuating assessment will be Rs. 39,000 per annum.

The total collections of revenue and those of land revenue alone are shown below, in thousands of rupees:—

Land revenue administration.

	1880-81.	1890-91.	1900-01.	1903-04.
Land Revenue	 4,24,	5,85,	6,48,	8 ,og,
Total Revenue	 5,08,	7,44,	9799,	11,90,

Local and municipal. The District contains four municipalities, HISSAR, HANSI, BHIWANI and SIRSA, and three notified areas, FATAHABAD, TOHANA and Budhlā la. Outside these areas local affairs are managed by the District board, whose income amounted in 1903-04 to 1½ lakhs. The expenditure in the same year was 1'3 lakhs, education and public works forming the principal items.

Police and jails

The regular police force consists of 681 of all ranks, of whom 180 are municipal police and is under a Superintendent who is usually assisted by 4 Inspectors. The village watchmen number 1,474, and 42 chaukidārs are directly under the Superintendent of Police. There are 19 police stations, 4 outposts, and 6 road-posts. The District jail at head quarters has accommodation for 252 prisoners.

Education.

The District stands 25th among the 20 Districts of the Province in respect of the literacy of its population. In 1901 the proportion of lite ate persons was 27 per cent. (5 males and 1 females). The number of pupils under instruction was in 1880-81, 1,753;* in 1890-91, 3,568; in 1900-01, 3,803; and in 1903-04, 4,258. In the last year there were 6 secondary and 73 primary public schools, and 3 advanced and 46 elementary private schools, there being 167 female scholars in the public and 91 in the private schools. The anglo-vernacular schools at Hissār, Bhiwāni and Sirsa are the most important. Two Mission girls' schools at Bhiwāni are maintained by the Baptist Zanāna Mission. The total expenditure on education

^{*} For the District as then constituted.

in 1903-04 was Rs. 40,000, to which Provincial funds Hissar contributed Rs. 2,000, and municipalities Rs. 11,000, fees DISTRUIT. realizing Rs. 10,000. Rs. 16,000 were met from District funds, and the rest, Rs. 1,000, from subscriptions and endowments.

Besides the dispensary at Hissar, the District possesses 8 out- Hospitals and lying dispensaries. In 1904, at these institutions 71,314 out- dispensaries. patients and 2,216 in-patients were treated, and 6,027 operations performed. The expenditure in 1904 was Rs. 20,000, the bulk of which was met from municipal funds.

The number of successful vaccinations in 1903-04 was Vaccination, 18,038 or 23.7 per mille of the population.

[J. Wilson, General Code of tribal custom in the Sirsa District, 1883; P. J. Fagan, District Gaze teer, 1892 (under revision); A. Anderson and P. J. Fagan, Settlement Report of Hissar, 1892; C. M. King, Settlement Report of Sirsa and Fāzilka Tahsils, 1905. 1

Hissar Tahsil .- Tahsil of the Hissar District, Punjab, lying on the borders of the Bikaner desert, between 28° 54' and 29° 32' N. and 75° 22' and 76° 2' E., with an area of 810 square miles. Its population was 128,783 in 1901 compared with 122,299 in 1891. HISSAR (population 17,647) is the headquarters. The tahsil also contains 134 villages, and the land revenue and cesses, amounted in 1903-04 to 16 lakhs. The northern part of the tahsil is a bare plain, forming part of the trace known as Hariana where the soil is a firm sandy loam. South of the thin belt of fertility afforded by the Western Jumna Canal, the level stretches of poor cultivation gradually merge into the rolling sandhills characteristic of the neighbouring State of Bikaner.

Hānsi Tahsīl.-Tahsīl of the Hissār District, Punjab. lying between 28° 51' and 29° 27' N. and 75° 48' and 76° 20' E., with an area of 799 square miles. Its population was 178,933 in 1901 compared with 165,689 in 1891. It contains the town of HANSI (population 16,523), its head-quarters, and 132 villages, and the land revenue and cesses, amounted in 1903-04 to 2 lakhs. The whole of the tahsil lies within the tract known as Hariana. The northern part is fully irrigated by the Western Jumna Canal, and is comparatively well-wooded. South of the canal the country is featureless, but fertile enough in a year of good rainfall.

Bhiwāni Tahsīl (Bhawāni).—Tahsī lof the Hissār District, Punjab, lying between 28° 36' and 28° 59' N. and 75° 29' and 75° 18' E., with an area of 750 square miles. Its population was 124,429 in 1901 compared with 127,794 in 1891. Its head-quarters are at the town of Bhiwani (population 35,917), and it also contains 131 villages, among which is Tosham, a place of some historical importance. The land revenue and cesses, amounted in 1903-04 to 1'2 lakhs. The northern part of the tahsīl lies in Hariāna. South of Bhiwāni town, rolling sandhills and low rocky eminences are the main features of the landscape.

Fatahābād Tahsīl (Fatehābād).—Tahsīl of the Hissār District, Punjab, lying between 29° 13' and 29° 48' N. and 75° 13' and 76° E., with an area of 1,179 square miles. Its population was 190,921 in 1901 compared with 181,638 in 1891. It contains one town, FATAHABAD (population 2,786), the tabsil head quarters, and 251 villages, among which are TOHANA and AGROHA, places of historical or archæological interest. The land revenue and cesses, amounted in 1903-04 to 2.3 lakhs. The Ghaggar has cut for itself a deep channel in the north of the tahsil. To the south of this channel, lies a broad belt of stiff clay, covered with sparse jungle interspersed with stretches of precarious cultivation, which depend on occasional floods brought by natural and artificial channels from the Ghaggar. The east of the tahsil lies in Hariana, but the centre and south are bare and sandy. A portion of the tahsil is irrigated by the Western Jumna Canal.

Tohana Sub-tahsil.—Sub-tahsil of the Fatāhābād tahsil, Hissār District, Punjab, with an area of 450 square miles. Tohana is the head-quarters. It contains 117 villages, and the land revenue and cesses, amounted in 1903-04 to Rs. 86,000.

Sirsa Tahsil.—Tahsil and sub-division of the Hissar District, Punjab, lying on the borders of the Bīkaner desert between 29° 13′ and 30° N. and 74° 29′ and 75° 18′ E., with an area of 1,642 square miles. Its population was 158,651 in 1901 compared with 178,586 in 1891. The town of Sirsa (population 15,800) is the tahsil head-quarters. It also contains 3 towns and 306 villages, and the land revenue and cesses, amounted in 1903-04 to 2.9 lakhs. The whole of the tahsil is sandy except the belt of stiff clay which forms the Ghaggar basin, and depends for its successful cultivation on the Ghaggar floods, which, below the Otu Iake and dam, are distributed over the country by the Ghaggar Canals. There is some irrigation in the north from the Sirhind Canal and in the south from the Western Jumpa Canal.

Dabwāli Sub-tahsīl.—Sub-tahsīl of the Sirsa tahsīl, Hissār District, Punjab, with an area of 349 square miles. It contains 59 villages, and the land revenue and cesses amounted in 1903-04 to Rs. 96,000.

HISSAR DISTRICT.

Skinner Estates.—A group of estates held by the descendants of Lieutenant-Colonel James Skinner, C.B., in the Districts of Hissar, Delhi and Karnal, Punjab. The area of the estates is 251 square miles in Hissar, 2.6 in Delhi and 21.4 in Karnāl, and the total revenue of the estates in His ar is Rs. 62,683. James Skinner, the son of a Scotch officer in the East India Company's service and a Rajput lady, was born in 1778 and received his first commission from de Boigne, the famous Savoyard adventurer, under Daulat Rao Sindhia. After many years' service under the Marathas, during which he was employed against the famous adventurer George Thomas, Skinner joined the British forces under Lord Lake in 1803, and received the command of 2,000 of Perron's Hindus ani Horse, who came over to the British after the battle of Delhi. This body served with great distinction under Skinner for 30 years and is now represented by the 1st Lancers and 3rd Cavalry (Skinner's Horse) of the Indian Army. Rising to be a Lieutenant-Colonel in the British service, Skinner obtained large grants of land in the Delhi territory, and settled at Hansi in the Hissar District, where he died in 1841. He built St. James' Church at Delhi in fulfilment of a vow. Major Robert Skinner, his younger brother, also served under Perron and eventually entered the Company's service.

Agroha.—An ancient town in Fatahābād tahsīl, Hissār District, Punjab, 13 miles north-west of Hissār, situated in 29° 20′ N. and 75° 38′ E. It is said to be the original seat of the Agarwāl Baniās, and was once a place of great importance. The remains of a fort are still visible about half a mile from the existing village, and ruins and débris half buried in the soil on every side attest its former greatness. It was captured by Muhammad of Ghor in 1194, since which time the Agarwāl Baniās have been scattered over the whole peninsula. The clan comprises many of the wealthiest men in India. The present village is quite unimportant and has (1901) a population of 1,172 only.

Bhiwāni Town (Bhawāni).—The head quarters of the Bhiwāni tahsīl in the Hissār District, Punjab, situated in 28° 48′ N. and 76° 8′ E., on the Rewāri-Bhatinda branch of the Rājputāna-Mālwā Railway; distant by rail from Calcutta 1,059

miles, from Bombay 890, and from Karāchi 857. Population (1901) 35,917. The town is practically a creation of British rule. being an insignificant village when it was selected in 1817 as the site of a free market. It rapidly rose to importance, and though its trade suffered greatly from the opening of the Rājputāna Mālwā Railway, the construction of the Rewari-Ferozepore line has restored it to its former position. Bhiwani is commercially the most important town of the Hissar District. It is one of the great centres of trade with Rajputana, the chief articles of commerce being wheat, flour, salt, sugar, cotton goods and iron. It possesses 3 cotton-ginning factories, and one cotton press, which give employment to 379 hands (1904). The principal manufactures are brass vessels, tin boxes and small wooden tables. The municipality was created in 1867. The average municipal receipts in the 10 years ending 1902-03 were Rs 54,900 and the expenditure Rs. 56,700. The income and expenditure in 1903-04 were Rs. 49,700 and Rs. 47,700 respectively; the chief source of income was octroi (Rs 42,700), while the main items of outlay were conservancy (Rs 7,000), 7,700) medical (Rs 6,900), public safety education (Rs (Rs 13,300) and administration (Rs 4,800). The town has an anglo-vernacular middle school and a dispensary.

Fatahābād Town (Fatehābād).—The head-quarters of the Fatahābād tahsīl, Hissār District, Punjab, situated in 29° 31' N. and 75° 27' E, 30 miles north-west of Hissār. Population (1901) 2,786. The town was founded about 1352 by the emperor Fīroz Shāh, who named it after his son Fateh Khān and had a canal dug to it from the Ghaggar. The fort contains a pillar inscribed with the genealogy of Fīroz Shāh, and a mosque and inscription of Humāyūn. The town is of no commercial importance. It is administered as a notified area, the income of which in 1903-04 was Rs. 1,700.

Hānsi town.—The head-quarters of the Hānsi tahsīl, Hissār District, Punjab, situated in 29° 7′ N. and 75° 58′ E., on the Rewāri-Bhatinda branch of the Rājputāna-Mālwā Railway, 15 miles from Hissār. Population (1901) 16,523. This is one of the most ancient towns in Northern India and appears to have been a stronghold of the Kushans, though local tradition makes it founded by Anang Pāl, the Tomar king of Delhi. According to the authorities quoted in Tod's Rājasthān, Asī or Hānsi was assigned to the son of Bīsaldeo Chauhān about 1000 A D. Masaud, son of Mahmūd of Ghazni, took it, after one failure, in 1036, but, according to Firishta, it was recovered by the Delhi Rājā in 1043. Prithwī Rāj made considerable additions to the fort at Hānsi, converting it into an important

military stronghold. It fell into the hands of Muhammad of Ghor in 1192, and was, until the foundation of Hissar, the administrative head-quarters of the neighbourhood. Hansi was depopulated by the famine of 1783, and lay deserted until 1798, when the famous adventurer George Thomas, who had seized upon the greater part of Hariana, fixed his head-quarters here. Thenceforth the town began to revive, and on the establishment of British rule in 1803, it was made a cantonment, where a considerable force, consisting chiefly of local levies, was stationed. In 1857 the troops mutinied, murdered all Europeans upon whom they could lay their hands, and combined with the wild Rajput tribes in plundering the country. On the restoration of order, the cantonment was given up. A high brick wall, with bastions and loopholes, surrounds the town, while the canal, which flows at its feet, contributes to its beauty by a fringe of handsome trees. Since the Mutiny, however, the houses have fallen into decay and the streets lie comparatively deserted, owing to the removal of the troops. The ruins of the fort overlook the town on the north. It contains two mosques and the tomb of Saiyid Niamat Ullah, killed in resisting Muhammad of Ghor. The mosque and tombs of Kutb Jamal-ud-din and his successors are on the west of the town, with the tomb of Ali Mir Tijara. Near by is a mosque called the Shahid Ganj, situated probably on the scene of Masaud's first unsuccessful attempt to take Hānsi.

The municipality was created in 1867. The average income for the 10 years ending 1902-03 was Rs. 18,500 and the expenditure Rs. 18,800, and the income and expenditure in 1903-04 were Rs. 30,000 and Rs. 20,000 respectively, the chief source of income being octroi. The town has 6 cotton-ginning factories, 2 cotton-presses, and 2 combined ginning and pressing factories, and is a local centre of the cotton trade. The number of factory hands in 1904 was 1,285. It possesses a vernacular middle school and a dispensary.

Hissār Town.—The head-quarters of Hissār tahsīl and District, Punjab, situated in 29° 10' N. and 75° 44' E., on the Rewāri-Bhatinda branch of the Rājputāna-Mālwā Railway, distant by rail from Calcutta 1,007 miles, from Bombay 979, and from Karāchi 819. Population (1901) 17,647. It was founded in 1356 by Fīroz Shāh Tughlak, and supplied with water by means of the canal now known as the Western Jumna Canal, and became the head-quarters of a sarkār. In 1408 Hissār fell into the hands of the rebels against Mahmūd Tughlak, but was recovered in 1411 by the emperor in person. It appears to have been occupied by an imperial garrison at the

time of Babar's invasion, and as the head-quarters of a sarkar was of considerable importance under the Mughals. The town was plundered by the Sikhs on several occasions between 1754 and 1768 and after the battle of Jind was occupied by Amar Singh of Patiāla, who built a fort. Hissār was depopulated by the famine of 1783, and was taken possession of by George Thomas. The inhabitants began to return, and when it passed to the British in 1803 the town was rapidly recovering. In 1857 detachments of the Hariana Light Infantry and 14th Irregular Cavalry stationed at Hissar mutinied, and the Collector and it other Europeans and native Christians were murdered. The chief relic of antiquity is the fort built by Firoz Shah largely with materials taken from Hindu or Jain temples. Another interesting building is the Jahāj, apparently once a Jain temple converted into a mosque, and used as a residence by George Thomas, of whose Christian name its present title is a corruption. Near Hissar is a handsome group of tombs erected to officers who fell in Humāyūn's campaign in Gujrāt in 1535. The trade of the town is unimportant, being confined to cotton and red pepper, but it contains a large cotton-ginning and pressing factory which in 1904 employed 397 hands. municipality was created in 1867. The average municipal receipts and the expenditure for the 10 years ending 1902-03 were Rs. 28,700 and 29,300 respectively, and its income and expenditure in 1903-04 were Rs 24,600 and Rs. 27,300 respectively, the chief source of income being octroi. The town possesses an anglo-vernacular high school managed by the Education department, and a civil hospital.

Sirsa Town.—The head-quarters of the Sirsa sub-division and tahsil, Hissar District, Punjab, situated in 29° 32' N. and 75° 2' E., on the Rewari-Bhatinda branch of the Rajputana-Mālwā Railway, on the north side of a dry bed of the Ghaggar. Population (1901) 15,800. The old town of Sirsa or Sarsūti is of great antiquity, and tradition ascribes its origin to an eponymous Rājā Sāras, who built the town and fort about 1,300 years ago. Under the name of Sarsūti it is mentioned as the place near which Prithwi Rāj was captured after his defeat by Muhammad of Ghor in 1192, and according to Wassaf it was in the 14th century one of the most important towns in Upper India. It was taken by Timūr, the inhabitants fleeing before him, and is mentioned in the reign of Mubarak Shah as the rendezvous of the expedition against the rebel fortress of Sirhind. In the reign of Sher Shah Sirsa became for a time the headquarters of Rao Kalyan Singh of Bikaner who had been driven from his country by the Jodhpur Rao. In the 18th century

Sirsa was one of the strongholds of the Bhattis and was taken HISSAR by Amar Singh of Patiāla in 1774, but restored to the Bhattis DISTRICT. by the agreement of 1781. The town was depopulated by the great famine of 1783, and the site was annexed in 1818 after the expedition sent against the Bhatti chief, Nawab Zabita Khān. In 1838 Sirsa, which had lain deserted since 1783, was refounded by Captain Thoresby, who laid out the present town, which from 1858 to 1884 was the head-quarters of the Sirsa District. The ruins of old Sirsa lie near the south-west corner of the modern station, and still present considerable remains, though much of the material has been used for building the new houses. It contains an ancient Hindu fort and tank.

The municipality was created in 1867. The average income for the 10 years ending 1902-03 was Rs. 23,300 and the expenditure Rs. 23,900, and the income and expenditure for 1903-04 were Rs. 18,100 the chi f source of income being octroi. The town is a centre of the export trade to Raiputana, and is in a flourishing condition. Most of the trade is in the hands of Banias from Rajputana and the country to the south-east. Sirsa contains a dispensary, an anglo-vernacular middle school maintained by the municipality, and an aided primary school for European boys.

Tohāna town.—Town in Fatahābād tahsīl, Hissār District, Punjab, situated in 29° 43' N. and 75° 54' E., 40 miles north of Hissar town. Population (1901) 5,931. It was once a city of some size and importance, founded, according to tradition, by Anang Pal, the Tomar Raja of Delhi. Ruined during the Chauhān supremacy, it recovered its prosperity in the early Musalman period; but having suffered many vicissitudes of plunder and famine, it has now sunk into an inferior position. It was the scene of a defeat of the Jats by Timur in 1308. Numerous remains in the neighbourhood testify to its former importance. The town is administered as a notified area which in 1903-04 had an income of Rs. 900.

Toshām. - A village in the Bhiwani tahsīl, Hissar District, Punjab, situated in 28° 54' N. and 75° 56' E., 23 miles south-west of Hissar town. Population (1901) 2,665. A bare rocky elevation, the highest in the District, rises abruptly above the town and desert plain to a height of 800 feet. A tank cut in the rock, half-way up the hill, forms the scene of a yearly fair, and is frequented by pilgrims, some of them from considerable distances. A bāradari on a small hill near the town is called Prithwi Rāj's kacherī, and an inscription close by was attributed by Sir Alexander Cunningham to an Indo-Scythian king, Toshāra.

ROHTAK DISTRICT.

Boundaries configuration, and hill and river systems.

Rohtak District.—A District in the Delhi Division of the Punjab, with an area of 1,797 square miles, lying between 28° 21' and 29° 17' N. and 76° 13' and 76° 58' E., on the borders of Rājputāna, in the high level plain that separates the waters of the Jumna and Sutlej. The eastern part within the undefined borders of the tract formerly known as HARIANA. In its midst lies part of the small State of DUJANA. It is bounded on the north by the Jind nizāmat of Jind State. and by the Karral District; on the east by the District of Delhi, and on the south-east by that of Gurgaon; on the south by Pataudi State and the Rewari tabsil of Gurgaon; on the southwest by territory belonging to the Nawab of Dujana; and on the west by the Dadri nizamat of Jind and by the Hissar District. Although there is no grand scenery in Rohtak, the canals with their belts of trees, the lines of sand-hills, and in the south the torrents, the depressions which are flooded after heavy rain, and a few small rocky hills give the District more diversified features than are generally met with in plains of the Punjab. The eastern horder lies low on the level of the Jumna Canal and the Najafgarh marsh. A few miles west the surface rises gradually to a level plateau, which, speaking roughly, stretches as far as the town of Rohtak, and is enclosed by parallel rows of sandhills running north and south. Beyond the western line of sandhills the surface rises again till it ends on the Hissar border in a third high ridge. The eastern line runs, with here and there an interval, down the east side of the District, and rises to some height in Jhajjar tahsil. South west of this ridge the country becomes more undulating, and the soil lighter. The south-eastern corner of the District is crossed by two small streams or torrents, the Sahibi and Indori; these flow circuitously, throwing off a net-work of branches and collecting here and there after heavy rain in jhils of considerable size, and finally fall into the Najafgarh swamp.

Geology.

With the exception of a few small outliers of Alwar quartzite belonging to the Delhi system, there is nothing of geological interest in the District, which is almost entirely of alluvial formation.

Botany.

The District forms an arm from the upper Gangetic plain between the central Punjab and the desert. Trees, except where naturalized or planted, are rare, but the nimbar (Acacia leucophloea) is a conspicuous exception. Mango groves

¹ Hacket, Geology of the Aravali Region, Records, Geol. Survey of India, xiv, part'4.

are frequent in the north-east; and along canals and road sides Rohrik other sub-tropical species have been planted successfully. ber (Zizyphus jujuba) is common, and is often planted.

Game including wild hog, black buck, ravine deer, nilgai Fauna. and hare is plentiful. Peafowl, partridge and quail are to be met with throughout the year; and, during the cold season. sandgrouse, wild geese, bustards and flamingoes. Wolves are still common, and a stray leopard is occasionally killed. The villages by the canal are overrun with monkeys.

The climate is not inaptly described in the Memoirs of Climate and George Thomas as "in general salubrious; though when the temperature. sandy and desert country lying to the westward becomes heated, it is inimical to an European constitution." In April, May and June the hot winds blow steadily all day from the west, bringing up constant sandstorms from the Raiputana desert; at the close of the year frosts are common, and strong gales prevail in February and March.

The average rainfall varies from 19 inches at Ihajjar to 21 Rainfall. at Rohtak. Of the rainfall at the latter place, 18 inches fall in the summer months and 3 in the winter. The greatest fall recorded during the years 1885-1902 was 41 inches at Jhajjar in 1885-86, and the least 8 inches at Rohtak in 1901-02.

The District belongs for the most part to the tract History. of HARIANA, and its early history will be found in the articles on that region and on the towns of ROHTAK, MAHAM and JHAJJAR. It appears to have come at an early date under the control of the Delhi kings, and in 1355 Firoz Shah dug a canal from the Sutlej as far as Jhajjar. Under Akbar the present District lay within the Sūbah of Delhi and the sarkars of Delhi and Hissar-Firoza. In 1643 the Rohtak canal is said to have been begun by Nawab Ali Khan, who attempted to divert water from the old canal of Firoz On the decay of the Delhi empire the District with the rest of Hariana was granted to the minister Rukn-ud-din in 1718; and in 1732 transferred by him to the Nawabs of Farrukhnagar in GURGAON. Faujdar Khan, Nawab of Farrukhnagar, who seems to have succeeded to the territories of Hissar on the death of Shahdad Khan in 1738, dving in 1747, handed down to his son Nawab Kamgar Khan a dominion which embraced the present Districts of Hissar and Rohtak, besides part of Gurgaon and a considerable tract subsequently annexed by the chiefs of Jind and Patiala. Hissar and the north were during this time perpetually overrun by the Sikhs

ROHTAK DISTRICT. in spite of the combined efforts of the BhattIs and imperial forces, but Rohtak and Gurgaon seem to have remained with Kamgar Khan till his death in 1760. His son, Mūsa Khān, was expelled from Farrukhnagar by Sūraj Mal, the Jat ruler of Bhartpur, and the Jats held Jhajjar, Badli and Farrukhnagar till 1771; in that year Mūsa Khān recovered Farrukhnagar, but he never regained a footing in the Rohtak District. In 1772 Najaf Khan came into power at Delhi, and till his death in 1782 some order was maintained. Bahādurgarh, granted in 1754 to Bahadur Khan, Baloch, was held by his son and grandson; Jhajjar was in the hands of Walter Reinhardt, husband of Begam Sumrū of Sardhana, and Gohāna, Maham, Rohtak and Kharkhauda were also held by nominees of Najaf Khān. The Marāthās returned in 1785, but could do little to repel the Sikh invasion, and from 1785 to 1803 the north of the District was occupied by the Raja of Jind, while the south and west were precariously held by the Marathas who were defied by the strong Jat villages, and constantly attacked by the Sikhs. Meanwhile the military adventurer George Thomas had carved out a principality in Hariana which included Maham, Beri and Jhajjar in the present District; his head-quarters were at Hansi in the District of Hissar, and at Georgegarh near Jhajjar he had built a small outlying fort. In 1801, however, the Marathas made common cause with the Sikhs and Rajputs against him, and under the French captain, Louis Bourquin, defeated him at Georgegarh, and succeeded in ousting him from his dominions. In 1803, by the conquests of Lord Lake, the whole country up to the Sutlej and the Siwāliks passed to the British Government.

Under Lord Lake's arrangements, the northern parganas of Rohtak were held by the Sikh chiefs of Jind and Kaithal while the south was granted to the Nawab of Jhajjar, the west to his brother, the Nawab of Dadri and Baladurgarh, and the central tract to the Nawab of Dujana. The latter, however, was unable to maintain order in his portion of the territories thus assigned, and the frequent incursions of Sikh and Bhatti marauders compelled the despatch of an English officer in 1810 to bring the region into better organization. The few parganas thus subjected to British rule formed the nucleus of the present District. Other fringes of territory escheated on the deaths of the Kaithal Raja in 1818, and the chief of Jind in 1820. In the last-named year, Hissar and Sirsa were separated from Rohtak; and in 1824 the District was brought into nearly its present shape by the District of Panipat (now Karnāl) being made a separate charge.

Up to 1832 Rohtak was administered by a Political Agent ROHTAK under the Resident at Delhi; but it was then brought under the General Regulations, and included in the North-Western Provinces. On the outbreak of the Mutiny in 1857 Rohtak was for a time completely lost to the British Government. The Muhammadan tribes united with their brethren in Gurgaon and Hissar, and began a general predatory movement under the Nawabs of Farrukhnagar, Jhajjar and Bahadurgarh, and the Bhatti chieftains of Sirsa and Hissar. They attacked and plundered the civil station at Rohtak, destroying every record of administration. But before the fall of Delhi, a force of Punjab levies was brought across the Sutlei, and order was restored with little difficulty. The rebel Nawabs of Jhajjar and Bahadurgarh were captured and tried. The former was executed at Delhi, while his neighbour and relative escaped with a sentence of exile to Lahore. Their estates were confiscated, part of them being temporarily included in a new District of Jhajjar, while other portions were assigned to the Rajas of Jind. Patiāla and Nābha as rewards for their services during the Mutiny. Rohtak District was transferred to the Punjab Government; and in 1860 Jhajjar was broken up, part of it being added to the territory of the loyal Rajas, and the remainder united with Rohtak.

There are no antiquities of any note, and the history of Archaelegy. the old sites is unknown. Excavations at the ROHTAK Khokra Kot would seem to show that three cities have been successively destroyed there; the well known coins of Rājā Samanta Deva, who is supposed to have reigned over Kābul and the Punjab about 920 A D., are found at Mohan Bari. JHAJJAR, MAHAM and GOHANA possess some old tombs, but none is of any special architectural merit; the finest are at the first place. There is an old baoli at Rohtak and another at Maham: the latter has been fully described by the author of "Pen and Pencil Sketches," and must have been in much better repair in 1828 than it is now. The Gackaran tank at Rohtak, and the Būāwāla tank at Jhajjar are fine works, while the masonry tank built by the last Nawab of Jhajjar at Chuchakwas is an exceedingly handsome one. The asthal or Jog monastery at Bohar is the only group of buildings of any architectural pretensions in the District; the Jhajjar palaces are merely large houses on the old Indian plan.

Rohtak contains 11 towns and 491 villages. Its population The people. at each of the last four enumerations was: 1868, 531,118; 1881, 553,609; 1891, 590,475; 1901, 630,672. It increased by 6.8 per cent. between 1891 and 1901, the increase being greatest

ROHTAK DISTRICT. The people, in the Sāmpla tahsīl, and least in that of Jhajjar. It is divided into four tahsīls, Rohtak, Jhajjar, Sāmpla and Gohāna the head-quarters of these being at the places from which each is named. The chief towns are the municipalities of ROHTAK, the administrative head-quarters of the District, JHAJJAR, BERI, BAHADURGARH and GOHANA.

The following table shows the distribution of population in 1001:-

	les,	Number of			square	variation between	rsons able
Tahsīl.	Area in square miles,	Towns.	Villages.	Population.	Population per mile.	Percentage of vein population b	Number of persons to read and wite
Kohtak	592	5	102	197,727	334.0	+ 8.2	7,648
Sāmpla	419	2	122	162,423	397'1	+ 8.4	3,810
Jhajjar	466	1	189	123,227	261.4	+ 3.2	3,598
Gohāna	336	3	78	147,295	438.4	+ 6.3	2011
District Total	*1,797	11	491	630,672	350.0	+ 6.8	17,067

* The only figures available for the areas of tabsils are those derived from the revenue returns, and the tabsil densities have been calculated on the areas given in the revenue returns, for 1900-01. The total of the tabsil areas does not agree with the District area as shown in the Census Report of 1901, in the table above and on page 22, which is the area as calculated by the Survey department. The slight difference is due to the different methods of measurement used by the Revenue and Survey departments.

Hindus number 533,723 or 85 per cent. of the people, and Muhammadans 91,687. About 85 per cent. of the population live in villages, and the average population in each village is 1,096, the largest of any District in the Punjab. The language ordinarily spoken is Western Hindi.

Their castes and occupa-

The Jāts (217,000) comprise one-third of the population and own seven-tenths of the villages in the District. The vast majority are Hindus, and the few Muhammadan Jāts are of a distinctly inferior type. The Hindu Rājputs (7,000) are a well-disposed peaceful folk, much resembling the Jāts in their ways; the Ranghars or Muhammadan Rājputs (27,000) on the other hand have been aptly described as good soldiers and indifferent cultivators, whose real forte lies in cattle-lifting. Many now enlist in the 1st Skinner's Horse, 12th Cavalry and other regiments. The Ahīrs (17,000) are all Hindus and excellent culti-

vators. There are 9,000 Malis and 3,000 Gujars. The Brahmans Rohtag (65,000) were originally settled by the Jats when they founded DISTRICT. their villages, and now they are generally found located in Jat estates. They are an inoffensive set, venerated but not respected. Of the commercial classes the Banias (45,000) are the most important, and of the menials the Chamars (leather-workers 55,000), Chühras (scavengers 23,000), Dhānaks (scavengers 21,000), Jhinwars (water-carriers 12,000), Kumhars (potters 13,000), Lohars (blacksmiths 9,000), Nais (barbers 13,000). Tarkhans (carpenters 13,000) and Telis (oil-workers 7,000). There are 17,000 Fakirs. About 60 per cent. of the population are agriculturists and 21 per cent. industrial.

The Mission of the Society for the Propagation of the Christian Gospel has a branch at Rohtak, and in 1901 the District contain. missions. ed 41 native Christians.

The general conditions with regard to agriculture in General agridifferent parts depend rather on irrigation than on differ- cultural conences of soil. Throughout the District the soil consists as a rule of a good light-coloured alluvial loam, while a lighter and sandier soil is found on elevations and clay soils in depressions of the land. All soils alike give splendid returns with sufficient rainfall, and unless irrigated, fail entirely in times of drought, though the sandy soil can do with less rain than the clay or loam. The large unirrigated tracts are absolutely dependent on the autumn harvest and the monsoon rains. Roughly speaking, the part north of the railway may be classed as secure, that to the south as insecure, from famine. The whole of the soil contains salts, and saline efflorescence is not uncommon where the drainage lines are obstructed.

The District is held almost entirely on the pattidari and Chief agribhaiyāchāra tenures, zamīndāri lands covering only about 8,000 cultural statisacres and lands leased from Government about 5,500 acres. The tics and following table shows the main agricultural statistics in principa 1303-04, areas being in square miles :-

		Tahsil.		Total.	Cultivated.	Irrigated.	Culturable waste.
Rohtak		•••		592	511	186	47
Sampla				409	346	122	38
Jhajjar	•••	•••		466	382	59	59
Gohānā				336	281	159	33
		Total	•••	*1,803	1,520	526	177

^{*}See note to table on page 26.

ROHTAK DISTRICT. Chief agricultural statistics and principal crops. Wheat is the chief crop of the spring harvest and occupied 103 square miles in 1903-04; gram occupied 141 square miles and barley 47 square miles. In the autumn harvest the spiked and great millets are the principal staples, occupying 338 and 335 square miles respectively, Cotton occupied 65 square miles, sugarcane 31 and pulses 138. Indigo is grown to a small extent, but only for seed.

Improvements in agricultural practice.

The cultivated area increased from 1,4c6 square miles in 1879 to 1,520 square miles in 1903 04, in which year it amounted to 84 per cent. of the total area. The increase of cultivation during the 20 years 1881—1901 is chiefly due to canal extensions, and it is doubtful whether further extension is possible. Fallows proper are not practised: the pressure of population and the division of property are perhaps too great to allow them. For rain-land cultivation the agriculturist generally sets aside over two-thirds of his lands in the autumn and rather less than one-third in the spring, and the land gets rest till the season for which it is kept comes round again: if there is heavy rain in the hot weather, the whole area may be put under the autumn crop, and in that case These arrangements are due no spring crop is taken at all. to the nature of the seasons, rather than to any care for the soil. On lands irrigated by wells and canals a crop is taken every harvest, as far as possible; the floods of the natural streams usually prevent any autumn crop, except sugarcane, being grown on the lands affected by them. Rotation of crops is followed, but in a very imperfect way, and for the sake of the crop rather than the soil. Nothing worth mention appears to have been done in the way of improving the quality of the crops grown.

Except in the Jhajjar tahsīl, where there is a good deal of well irrigation, advances under the Land Improvement Act were not popular till recent years; nor are advances under the Agriculturists' Loans Act common, except in times of scarcity, as the people prefer to resort to the Banias. During the 5 years ending September 1904, 5'3 lakhs were advanced, including 4'9 lakhs under the Agriculturists' Loans Act. Of this sum, 3 lakhs were lent during the famine year 1899-1900.

Cattle, ponies and sheep.

The bullocks and cows are of a very good breed, and particularly fine in size and shape. A touch of the Hānsi strain probably pervades them throughout. The bullocks of the villages round Beri and Georgegarh have a special reputation, which is said to be due to the fact that the Nawāb

of Jhajjar kept some bulls of the Nagaur breed at Chuchakwas. Rонтак The breed is small, hardy, active and hardworking, but is said to have fallen off since the confiscation of the Jhajjar State. The zamindars make a practice of selling their bullocks after one crop has come up, and buying fresh ones for the next sowings, thereby avoiding the expense of their keep for four or five months. The extensive breaking up of land, which has taken place since 1840, has greatly restricted the grazing grounds of the villages; the present fodder-supply grown in the fields leaves but a small margin to provide against seasons of drought; and in many canal estates difficulty is already being experienced on this score. Few large stretches of village jungle are now to be found, and the policy of giving proprietary grants has reduced by more than half the area of the Jhajjar and Bahadurgarh preserves. A large cattle fair is held at Georgegarh. The ponies of the District are of the ordinary mediocre type. Goats and sheep are owned as a rule by village menials. The District board maintains 3 horse and 3 donkey stallions,

Of the total area cultivated in 1903-04, 526 square miles, or Irrigation. nearly 36 per cent., were classed as irrigated. Of this area 453 square miles were irrigated by canals, and 72 by wells alone. The District had 2,903 masonry wells in use, all worked by cattle on the rope and bucket system, besides 864 unbricked wells, water lifts and lever wells. Canal irrigation more than trebled and well irrigation more than doubled in the 20 years 1881-1901. The former is derived entirely from the WESTERN JUMNA Canal, the Būtāna branch of which (with its chief distributary, the Bhiwani branch) irrigates the Gohana and Rohtak tahsi's; while various distributaries from the new Delhi branch supply Rohtak and Sampla. The area estimated as annually irrigable from the Western Jumna is 278 square miles. There used to be a certain amount of irrigation from the Sahibi and Indori streams, but this has been largely obstructed by dams erected in Alwar State territory. Wells are chiefly found in the south of Jhajjar and in the flood-affected tracts of Sāmpla.

The District contains no forests except 8 square miles of Forests. Government waste under the control of the Deputy Commissioner, and save along canals and water-courses and immediately round the village trees are painfully wanting. Reserved village jungles are, however, a feature of the District and are found in nearly every village.

The Sultanpur salt sources are situated in 5 villages Minerals. in GURGAON and in one in this District in Jhajjar tabsil'

ROHTAK DISTRICT. A large amount of kankar is found, some of which is particularly pure and adapted for the preparation of lime. The low hills in the south yield a limestone suitable for building purposes.

Arts and

The chief manufactures are the pottery of JHAJJAR; the manufactures. saddlery and leather work of . KALANAUR; muslin turbans. interwoven with gold and silver thread, and a muslin known as tanzeb produced at ROHTAK; and the woollen blankets woven Dyeing is a speciality of Jhajjar. The bullock in all parts. carts of the District are well and strongly made. Four cottonginning factories and one combined ginning and pressing factory have recently been opened in Rohtak, and naturally absorb a good deal of the raw cotton of the District. In 1904 they employed 279 hands. In other industries the native methods of production are adhered to, and, though in the towns foreign sugar and cloth are making their way, in the villages native products hold their own. Cwing to the opening of the factories and the Rohtak grain market the demand for labour has considerably increased and wages have risen.

Commerce.

In ordinary seasons the District exports grain, the annual export of cereals being estimated in the famine report of 1896-97 at 89,000 tons. The construction of the Southern Punjab Railway has greatly facilitated export at all times and imports in time of scarcity, the monthly average imported by this line during the famine year 1899 being no less than 3 400 tons. Commerce is also much helped by the Rohtak grain market owing to its favourable position, its exemption from octroi, and the facilities given for grain storage.

Railways ard roads.

Rohtak is traversed by the Southern Punjab Railway, and the Rewari-Bhatinda branch of the Rajputana-Malwa Railway crosses the west side of Jhajjar tahsil; the terminus of the branch from Garhi Harsaru to Farrukhnagar is about a mile from the border. The District is well provided with roads. the most important of which are the Dehli-Hissar, Rohtak-Bhiwani and Rohtak-Jhajjar roads, all of which are metalled. The total length of metalled road is 79 miles and of unmetalld 605. Of these 20 miles of metalled and 41 miles of unmetalled roads are under the Public Works department and the rest belong to the District board.

Famine.

The first famine of which there is any trustworthy record is that of 1782-83, the terrible chalisa. From this famine a very large number of villages of the District date their refoundation, in whole or in part. Droughts followed in 1802,

1812, 1817, 1833 and 1837. The famine of 1860-61 was the first in which relief was regularly organized by Government. Nearly 500,000 daily units were relieved by distribution of food and in other ways; nearly 400,000 were employed on relief works, and Rs. 34,378 were spent on these objects. Rs. 2,50,000 of land revenue were ultimately remitted. In 186:-69, 719,000 daily units received relief, 125,100 were employed at various times on relief works, Rs. 1,35,000 nearly were spent in alleviating the calamity, and more than Rs. 2,00,000 of revenue in all were remitted. The special feature of the relief in this famine was the amount raised in voluntary subscriptions by the people themselves, which was nearly Rs. 45 0.0. There is said to have been great loss of life, and nearly 90,000 head of cattle died. The next famine occurred in 1877-78. Highway robberies grew common, grain carts were plundered, and in the village of Badli a grain riot No relief was, however, considered necessary, nor was the revenue demand suspended: 176,000 head of cattle disappeared, and it took the District many years to recover. The harvests of 1895-96 were a failure, and in 1896 97 there was literally no crop in the rain-land villages. Relief operations commenced in November 1896 and continued till the middle of July, at which time there was a daily average of 11,000 persons on the relief works. Altogether Rs. 96,300 were spent in alleviating distress, and suspensions of revenue amounted to 3.4 lakhs. The famine was, however, by no means severe; more than three-fourths of the people on relief works were menials, and there were large stores of fodder and grain in most of the villages. The famine of 1899-1900 was only surpassed in severity by the chālīsa famine above mentioned. The spread of irrigation had, however, largely increased the area protected from famine, and, while in 1895-97 the affected area was 1,467 square miles, in 1899-1900 this had shrunk to 1,234 in spite of the greater severity of the drought. The greatest daily average of persons relieved was in the week ending March 10th, 1900, when 33,632, or 9 per cent. of the population affected, were in receipt of relief. The total cost of the famine was 7.5 lakhs. The total deaths from December 1899 to October 1900 were 25,006, giving a deathrate of 69 as compared with the average rate of 37 per thousand. Fever was responsible for 18,279 and cholera for 1,935. The losses of cattle amounted to 1,82,000.

The District is in charge of a Deputy Commissioner, District subassisted by three Assistant or Extra Assistant Commis- divisions and sioners, of whom one is in charge of the District treasury, staff,

ROHTAR DISTRICT. Each of the four tahsils, Rohtak, Sāmpla, Jhajjar and Gohāna is under a tahsildār and naib-tahsildār.

Law and justice.

The Deputy Commissioner, as District Magistrate, is responsible for criminal justice. Civil Judicial work is under a District Judge; and both officers are controlled by the Divisional Judge of Delhi, who is also Sessions Judge. The District Judge has two Munsifs under him, one at head quarters, the other at Jhajjar. The District has also six honorary magistrates. The predominant form of crime is bunglary.

Land revenue administration. The villages are of unusual size, averaging over 1,000 persons. They afford an excellent example of the bhaiyāchāra village of Northern India, a community of clansmen linked together, sometimes by descent from a common ancestor, sometimes by marriage ties, sometimes by a joint foundation of the village, with no community of property, but combining to manage the affairs of the village by means of a council of elders; holding the waste and grazing grounds, as a rule, in common, and maintaining, by a cess distributed on individuals, a common fund to which public receipts are brought and expenditure charged.

The early revenue history under British rule naturally divides itself into two parts, that of the older tracts which form most of the area included in the three northern tahsils, and that of the confiscated estates which belonged before the Mutiny to the Nawabs of Jhajjar and Bahadurgarh. Thus the regular settlements made in 1838-40 only included half the present District. The earlier settlements made in the older part followed Regulation IX of 1805, and were for short terms. In Rohtak little heed was paid to the Regulation, which laid down that a moderate assessment was equally conducive to the true interests of Government and to the well-being of its subjects. The revenue in 1822 was already so heavy as to be nearly intolerable, while the unequal distribution of the demand was even worse than its burthen. Nevertheless an increase of Rs. 2,000 was taken in 1825 and Rs. 4,000 shortly after. The last summary settlement made in 1835 enhanced the demand by Rs. 20,000. The regular settlement, made between 1838 and 1840, increased the assessment by Rs. 14,000. This was never paid, and the revision, which was immediately ordered, reduced it by 11 lakhs, or 16 per cent. The progress of the District since this concession was made has been a continuing proof of its wisdom.

Bahadurgarh and Jhajjar were resumed after the Mutiny. The various summary settlements worked well on the whole, and a regular settlement was made between 1860 and 1863.

The settlement of the whole District was revised between ROHTAK 1873 and 1879. Rates on irrigated lands varied from Rs. 2 DISTRICT. to Rs. 2-12, and on unirrigated from 5 annas to R. 1-9. Land revenue Canal-irrigated lands were as usual assessed at a dry rate administraplus owners' and occupiers' rates. The result of the new assessment was an increase of 9½ per cent. over the previous previous demand. The demand for 1903-04, including cesses, came to nearly 11 lakhs. The average size of a proprietary holding is 5 acres.

The total collections of revenue and those of land revenue alone are shown below, in thousands of rupees:-

	1880-81.	1890-91.	1900-01	1903-04.
Land Revenue	9,43,	9,07,	7,43,	8,r5,
Total Rsvenue	11,09,	10,83,	10,37,	11,34,

The District contains 5 municipalities, ROHTAK, BERI, Local and THATTAR, BAHADURGARH and GOHANA, and 10 notified areas, of which the most important are MAHAM, KALANAUR, MUND-LANA and BUTANA. Outside these areas local affairs are managed by a District board, whose income amounted in 1903-04 to Rs. 1,24,000. The expenditure in the same year was Rs. 1,22,000, the principal item being public works.

The regular police force consists of 433 of all ranks, of Police and whom 63 are municipal police and is under a Superintendent, jails. who is usually assisted by 2 Inspectors. The village watchmen number 702. The District has 10 police stations, 4 out-posts, and 17 road-posts. Three trackers and three camel sowars now form part of the ordinary force. The District jail at headquarters has accommodation for 230 prisoners.

The standard of education is below the average, though Education, some progress has been made. The District stands 26th among the 28 Districts of the Province in respect of the literacy of its population. In 1901, 2'7 per cent. of the population (5

ROHTAR DISTRICT. males and 1 females) could read and write. The number of pupils under instruction was in 1880-81, 2,396; in 1890-91, 3,380; in 1900-01, 5,097; and in 1903-4, 5,824. In the last year the District possessed 9 secondary and 65 primary public schools and 2 advanced and 42 elementary private schools, there being 211 female scholars in the public and 8 in the private schools.

The anglo-vernacular school at Rohtak with 262 pupils is the only high school. The other principal schools are two anglo-vernacular middle schools supported by the municipalities of Jhajjar and Gohāna, and 6 vernacular middle schools. The total expenditure on education in 1903-04 was Rs. 44,000, chiefly derived from District funds; fees providing nearly a third, and municipal funds and Provincial grants between them a fifth.

Hospitals and dispensaries.

Besides the Rohtak civil hospital the District possesses 5 outlying dispensaries. These in 1904 treated a total of 59,714 out-patients and 1,016 in-patients; while 2,894 operations were performed. The income for 1904 was Rs. 10,000, almost entirely derived from local and municipal funds. Establishment cost Rs. 5,000 and medicines Rs. 3,000.

Vaccination.

The number of successful vaccinations in 1903-04 was 14,406, representing 22'8 per thousand of population. The towns of Rohtak and Beri have adopted the Vaccination Act.

(D. C. J. Ibbetson, District Gazettier, 1883-84; H. C. Fanshawe, Settlement Report, 1880.)

Rohtak Tahsil.—Tahsil of the Rohtak District, Punjab, lying between 28° 38′ and 29° 6′ N. and 76° 13′ and 76° 45′ E., with an area of 592 square miles. Its population was 197,727 in 1901 compared with 182,649 in 1891. It contains the 5 towns of Rohtak (population 20,323), the tahsil head-quarters, Beri (9,723), Kalanaur (7,640), Kahnaur (5,024) and Maham (7,824) and 102 villages, including Sanghi (5,126). The land revenue and cesses amounted in 1903-04 to 2.9 lakhs. The plain is broken by a chain of sandhills on the east and by scattered sandy eminences elsewhere, and is partially irrigated by the Western Jumna Canal. Trees are scarce except round the villages and along the older canal-branches.

Sāmpla Tahsil.—Tahsil of the Rohtak District, Punjab, lying between 28° 35′ and 29° 1′ N. and 76° 35′ and 76° 58′ E., with an area of 409 square miles. Its population was 162,423 in 1901 compared with 149,818 in 1891. It contains the towns of Bahadurgarh (population 5,974) and Kharkhauda (3,765),

and 122 villages, including the notified area of Sampla, its head-quarters. The land revenue and cesses amounted in 1903-04 to 3 lakhs. The greater part of the tahsil is, naturally, an arid upland plain, the northern portion of which is now irrigated by the Western Jumna Canal. In the extreme south-east is a small low-land tract, irrigated by countless water-lifts.

ROHTAK DISTRICT.

Jhaijar Tahsil.-Tahsil of the Rohtak District, Punjab. lying between 28° 21' and 28° 41' N. and 76° 20' and 76° 54' E., with an area of 466 square miles. Its population was 123,227 in 1001 compared with 119,453 in 1891. It contains one town JHAJJAR (population 12,227), the tabsil head-quarters, and 189 villages including GEORGEGARH, founded by George Thomas. The land revenue and cesses amounted in 1903-04 to 29 lakhs. The tabsil is intersected in all directions by sand-ridges which often rise to a considerable height. On the east the lowlying land used to be regularly flooded by the Sahibi and Indauri streams, and large lakes used to form in the depressions, but of recent years the volume of these torrents has diminished, and the country rarely remains floo led for any considerable period of time. The north of the tahsil is a continuation of the plateau of the Rohtak and Sampla tahsils, while in the south a few low rocky eminences lend variety to the landscape.

Gohana Tahsii.—Tahsil of the Rohtak District, Punjab, lying between 28° 57' and 29° 17' N. and 76° 29' and 76° 52' E., with an area of 336 square miles. Its population was 147,295 in 1901 compared with 138,555 in 1891. It contains the 3 towns of Gohana (population 6,567), its head-quarters, Barauda (5,836), and Butana (7,509), and 78 villages including Mundlana (5,657). The land revenue and cesses amounted in 1903-04 to 2.6 lakhs. The tahsil is flat and well wooded, and ample means of irrigation are available.

Bahādurgarh—Town in the Sāmpla tahsīl, Rohtak District, Punjab, lying in 28° 41′ N. and 76° 56′ E. 18 miles west of Delhi on the Rohtak road, and on the Southern Punjab Railway. Population (1901) 5,974. The name of the town was originally Sharafābād. It was given in jāgir to Bahādur Khān and Tāj Muhammad, Baloch chiefs of Farrukhnagar, in 1754, and its name changed to Bahādurgarh. The jāgīr was resumed in 1793 by Sindhia, and in 1803 the town and the surrounding villages were bestowed by Lord Lake on Ismail Khān, brother of the Nawāb of Jhajjar. The estate was confiscated in 1857 owing to the disloyalty of the chief Bahādur Jang. The municipality was created in 1873. Its average income and expenditure for the 10 years ending 1902-03 were Rs. 6,600.

ROHTAK DISTRICT. The income and expenditure for 1903-04 amounted to Rs. 6,400, the income being chiefly from octroi. The town is of no commercial importance. The municipality maintains a vernacular middle school and a dispensary.

Barauda (Baroda).—A village in the Gohāna tahsīl, Rohtak District, Punjab, situated in 29° 9′ N. and 76° 37′ E., on the Butāna branch of the Western Jumna Canal. Population (1901) 5,836.

and District. Rohtak tahsil Beri.-Town in the Punjab, situated in 28° 42' N and 76° 35' E., 15 miles south of Rohtak town on the direct road from Delhi to Bhiwani. Population (1901) 9,723. It formed part of the estate of George Thomas, who took it by storm from a garrison of Jats and Rajputs. It is now the great trade centre of the neighbourhood, and the residence of many wealthy traders and bankers Two large fairs are held annually in February and October. municipality was created in 1867. Its average annual income and expenditure for the 10 years ending 1902-03 were Rs. 9,800 and 10,200 respectively. The income for 1903-04was Rs. 6,200, chiefly raised from octroi and expenditure Rs. 7 300. It maintains a vernacular middle school.

Butāna.—Town, administered as a notified area, in the Gohāna tahsīl, Rohtak District, Punjab, situated in 29° 12′ N. and 76° 42′ E, 19 miles north of Rohtak on a branch of the Western Jumna Canal, to which it gives its name. Population (1901) 7,509.

Georgegarh (7ahāzçarh).—A village in the Jhajjar tahsīl, Rohtak District, Punjab, situated in 28° 37' N. and 76° 36' E. Population (1901) 1,285. It was founded by George Thomas, who built a fort here to overawe the towns of Beri and Jhajjar, and was besieged and taken by a large Marāthā force under Major Louis Bourquin, Thomas being obliged to retire to Hānsi. A large cattle fair is held here twice a year.

Gohāna Town.—Head-quarters of the Gohāna tahsil, Rohtak District, Punjab, situated in 29° 8′ N. and 76° 42′ E., on the Western Jumna Canal, 20 miles north of Rohtak. Population (1901) 6,567. The town is said to have been the site of a fort belonging to Prithwi Rāj, afterwards destroyed by Muhammad of Ghor. A yearly fair is held at the shrine of Shāh Zia-ud-dīn Muhammad, a Muhammadan saint, who accompanied Muhammad of Ghor to India. There are two temples in honour of the Jain Arhat Parasnāth, at which a yearly festival takes place. The municipality was created in 1873. Its average income for the 10 years ending 1902-03 was Rs. 9,300 and expenditure Rs. 9,500. The income for 1903-04, amounting

to Rs. 8,300, was chiefly derived from octroi and expenditure to Rohtak Rs. 8,200. The town is of no commercial importance. The District. municipality maintains a dispensary and an anglo vernacular middle school.

Jhajjar Town.—Head-quarters of the Jhajjar tahsil, Rohtak District, Punjab, lying in 28° 36' N. and 76° 40' E., 21 miles south of Rohtak and 35 miles west of Delhi. Population (1901) 12,227. The town was destroyed by Muhammad of Ghor and refounded by a Jat clan. It was taken from the Nawabs of Farrukhnagar by the Jat chieftain Surai Mal, and afterwards fell into the hands of Sombre, husband of Begam Sumrū. Jhajjar was assigned to George Thomas in 1794, and on annexation in 1803 was granted to Nawab Najabat Khan. The estate was confiscated in 1857 owing to the disloyalty of the ruling chief, Abdur Rahmān Khān, who was hanged for his share in the Mutiny. Jhajjar became for a short time the head-quarters of a District of that name, which was abolished in 1860. The principal buildings are the old palace of the Nawabs and the new palace or Bagh Jahanara. The municipality was created in 1867. Its average income and expendi ure for the 10 years ending 1902-03 were Rs. 13,500 and 14,000 respectively. The income for 1903-04 amounted to Rs. 18,600, chiefly obtained from octroi, and expenditure to Rs. 13,800. The town is noted for its dyeing industry, and for the thin or 'paper' pottery produced. It has a considerable manufacture of muslins and woollen goods, and embroidery is also largely carried on. The municipality maintains a dispensary and an anglo-vernacular middle school.

Kahnaur.—Village in the Rohtak tahsīl and District, Punjab, situated in 28° 45' N. and 76° 32' E., 11 miles south of Rohtak and 15 miles north-west of Jhajjar. Population (1901) 5,024.

Kalānaur.—A town in the Rohtak tahsīl and District, Punjab, situated in 28° 50' N. and 76° 24' E, 12 miles west of Rohtak town on the road to Bhīwāni. Population (1901) 7,640. It was founded by Kalīan Singh and Bhawān Singh, two Ponwār Rājputs, sons-in-law of Anang Pāl, the king of Delhi, and named after the former. Kalānaur remained in the possession of their descendants who, though dispossessed for a time by the Baloches of Farrukhnagar, were reinstated by the Delhi court. The town is famous for its leather work, especially saddlery. It has a vernacular middle school.

Maham (Mahim).—A town in the Rohtak tahsil and District, Punjab, lying in 28° 58′ N. and 76° 18′ E., 20 miles west of Rohtak on the road to Hānsī. Population (1901) 7,824. Tradition alleges its destruction by Muhammad of Ghor, but though

ROHTAR DISTRICT. doubtless a place of some antiquity, it is not mentioned by historians before Akbar gave it in jāgār to Shāhbāz Khān, an Afghān. Under his descendants it flourished greatly until it was sacked by the Rājputs under Durga Dās in the reign of Aurangzeb. Since then, though re-peopled, it has never recovered its prosperity. It is a picturesque town with many interesting ruins, including a fine baoli or open well built by a mace-bearer of Shāh Jahān. It has a vernacular middle school.

Mundlana (Mandlana).—A village and notified area in the Gohana tahsil, Rohtak District, Punjab, situated in 29° 12′ N. and 76° 50′ E. Population (1901) 5,657.

Rohtak Town.-Head-quarters of the Rohtak District and tahsi, Punjab, lying 44 miles north-west of Delhi, in 28° 54' N. and 76° 35' E., on the Southern Punjab Railway; distant by rail from Calcutta 1,000 miles, from Bombay 1,026, and from Karāchi 863. Population (1901) 20,323, including 10,404 Hindus and 9,916 Muhammadans. It is plausibly identified with the Rauhitaka or Rauhita of the Rajatarangini and Alberuni, but tradition avers that its ancient name was Rohtāsgarh or "the fort of Rohtās," a Ponwār Rājā, and points to the mound called the Khokra Kot as the site of the old town. It is also said that Muhammad of Ghor destroyed the town soon after it had been re-built by Prithwi Raj in 1160, but it is not mentioned by the earlier Muhammadan historians. A colony of Shaikhs from Yemen is said to have built a fort, and the Afghans of Birahma, an ancient site close by, also settled in the town, which became the capital of a fiel of the Delhi Kai Khusru, the grandson and heir of Balban, was enticed from Multan by Kaikubad and put to death here about 1286, and in 1410 Khizr Khan, the Saivid, besieged Idris Khān in Rohtak fort, and took it after a six months' siege. After the decline of the Mughal power Rohtak, situated on the border line between the Sikh and Maratha powers, passed through many vicissitudes, falling into the hands of one chieftain after another. It became the head-quarters of the Rohtak District in 1824, and was plundered in the Mutiny of 1857.

The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 24,900 and expenditure Rs. 24,400. The income for 1903-04 was Rs. 25,000, chiefly derived from octroi, and expenditure Rs. 23,600. The town is an important trade centre, and four factories for ginning cotton, and one for ginning and pressing have recently been established there. The number of factory hands in 1904 was 279. Muslin turbans interwoven with gold and silver thread.

and a form of muslin known as tanzeb are produced. The ROHTAK anglo-vernacular high school is managed by the Education DISTRICT. department.

Sanghi.-Village and notified area in the Rohtak tahsil and District, Punjab, situated in 29° 1' N. and 76° 41' E. Population (1901) 5,126.

Gurgaon District.—A District in the Delhi Division of GURGAON DISTRICT. the Punjab with an area of 1,984 square miles. It lies in the extreme south-east of the Province, between 27° 39' and configuration, 28° 33' N. and 76° 18' and 77° 34' E., stretching towards the out- and hill and lying hills of the Rajputana table land, and its southern part river systems. belongs geographically to that part of northern Raiputana known the Mewat or the country of the Meos. It is bounded on the north by the States of Dujana and Pataudi, and the Districts of Rohtak and Delhi; on the east the river Jumna separates it from Bulandshahr and Aligarh in the United Provinces; on the south it marches with the Muttra District (United Provinces) and the Bhartpur State; on the west it is bounded by territories belonging to the States of Alwar, Jaipur and Nabha. The surface presents a considerable variety of contour. Two low rocky ranges, continuations of the Aravalli chain, enter its border from the south, and run northward in a bare and treeless mass towards the plain country, The northern plain falls into two natural divisions, divided by the western range. Eastwards, the valley between the two ridges lies wide and open throughout; and after the escarpment of the eastern ridge, an alluvial level extends unbroken to the banks of the Jumna. Immediately at the foot of the uplands lie a series of undulating hollows, which during the rains become extensive swamps. West of the western range lies the tahsil of REWARI, consisting of a sandy plain, dotted with isolated hills. Though naturally dry and sterile, it has become, under the careful hands of its Ahir inhabitants, a wellcultivated tract. Numerous torrents carry off the drainage from the hills, while large pools or jhils collect the water brought down by these torrents.

The greater part of the District is covered by the alluvium, Geology. but outcrops of rocks occur in numerous small hills and ridges. These are outliers of the slates and quartzites (Alwar quartzite) of the Delhi system. The slate is usually a fissile clay slate and is quarried near Rewari. There are brine wells in the Sulfanpur mahāl and sulphur springs at Sohna.*

^{*} Hacket, Geology of the Aravali Region, Records, Geol. Survey of India, xiv, part 4.

GURGAON DISTRICT.

Botany.

The flora is mainly that of north-eastern Rājputāna, and in the south-west includes several desert forms. Trees are few, except where planted; but on the hills that extend into the District from the Arāvalli ranges, gugal (Boswellia serrata), yielding frankincense, occurs, and also an acacia yielding catechu; while the south-east portion is characterized by the dhaok or dhao (Anogeissus pendula). The Jumna valley and the north-eastern corner belong botanically to the upper Gangetic plain.

Fauna.

The days when tigers abounded in Gurgaon on the wooded banks of the Jumna are long since gone by, though now and then a straggler from the Alwar hills is seen. Panthers occasionally appear in the hills, and the wild cat is commonly found in the jungles near by. The striped hyæna is found only in the neighbourhood of the hills. Leopards are not uncommon. Wolves, foxes and jackals are common in all parts. The sacred monkey is found in great numbers about Hodal, and there are also a few in Rewāri and Gurgaon. The wild boar inhabits the low hills near Bhaundī and Sohna, and the low lands of the Jumna. Both antelope and ravine deer are fairly plentiful: the former in the hilly and sandy parts; the latter in the lowlands. The nīlgai is also found in the southern parts of the Rewārī tahsīl. Hog deer are occasionally met with in the lowlands of the Jumna.

Climate and temperature. Both heat and cold are less extreme than in the Punjab proper, though near the hill ranges and in the Fīrozpur-Jhirka valley the radiation from the rocks makes the heat intense. Fever is the chief cause of mortality, but the District is the least feverish of the Division, Simla excepted. The flooded tracts near Nūh are particularly malarious, and fever has come with the Agra Canal into the high plain.

Rainfall.

The average rainfall varies from 22 inches at Rewarī to 26 at Gurgaon. Of the rainfall in the latter place $23\frac{1}{2}$ inches fall in the summer months and $2\frac{1}{2}$ in the winter. The uncertain nature of the monsoon is the most marked feature of the returns, the precipitation varying from 48 inches at Nüh in 1885-86 to 1 inch at Hattin in 1899-1900.

History.

Gurgaon, with the rest of the territory known as MEWAT, formed in early times part of an extensive kingdom ruled over by Rājputs of the Jaduvansi or Jādon tribe. The Jādon power was broken by Muhammad of Ghor in 1195, but for two centuries they sturdily resisted the Muhammadan domination, and the history of the District is a record of incursions of the people of Mewāt into Delhi territory and of punitive expedition

GURGAON DISTRICT.

undertaken against them. Under Firoz Shah III the Jadons were converted to Muhammadanism, and Bahadur Khan or Bahādur Nahar took a prominent part in the intestine struggles that followed the invasion of Timur, founding the family of the Khānzādas, members of which ruled Mewāt in partial independence of the Delhi empire. Bābar annexed Mewāt, and from this time the power of the Khānzādas rapidly declined. During the decay of the Mughal empire the District was torn between contending powers. In the north were the Nawabs of Farrukhnagar, a principality founded in 1732; in the centre an independent power had risen at Ghasera; Rewari was held by an Ahir family with forts at Gokalgarh and Guraora, while from the south the great Jat ruler Suraj Mal of Bharatpur was extending his dominions. He captured Ghasera and Farrukhnagar, but after his death in 1763 Farrukhnagar returned to its former rulers, and a great part of the tract was recovered for the empire by Najaf Kuli Khan. Under the Marathas the greater part of the District was held by generals de Boigne, Perron and Bourquin. Begam Sumrū owned the pargana of Jharsa, and George Thomas had that of Firozpur assigned to him in 1793, and once plundered Gurgaon, but lost this part of his possessions in the following year. In Rewari Tej Singh, ancestor of the present leading family of Abirs, allied himself with the Marathas and established himself in power.

After Lord Lake's conquests the District passed to the British with the rest of the country ceded by Sindhia in 1803, but was left in the hands of native assignees, the District of Gurgaon being formed piece-meal as their estates for one cause or another passed to the crown. The first of these acquisitions was in 1808, when Rewari, Nuh, Bahora and Sohna came under British rule, and a District was formed with its headquarters at Bharāwās near Rewāri. After the lapse of Hodal and Palwal the civil head-quarters were transferred to Gurgaon. More escheats followed, and in 1836 the Nawab of Firozpur-Jhirka lost his estates for complicity in the murder of Mr. William Fraser, Commissioner of Delhi, while Jharsa lapsed on the death of Begam Sumrū. In 1857 the Nawab of Farrukhnagar, followed by the Meos, rose in rebellion, while in Rewari the Ahir chief preserved an armed neutrality. Order was, however, quickly restored after the fall of Delhi, and the estates of Farrukhnagar confiscated.

The chief objects of antiquarian interest are at PALWAL, Archaology. HODAL, FARRUKHNAGAR, FIROZPUR-JHIRKA and REWARI.

GURGAON DISTRICT.

The people.

The District contains 8 towns and 1,171 villages. Its population at each of the last four enumerations was: 1868, 689,034; 1881, 641,848; 1891, 668,929; 1901, 746,208. It has increased by 11.5 per cent. between 1891 and 1901. There are five tahsils, Gurgaon, Firozpur, Nüh, Palwal and Rewāri, each named from the place at its head-quarters. The chief towns are the municipalities of REWARI, FARRUKHNAGAR, PALWAL, FIROZPUR-JHIRKA, SOHNA and HODAL. GURGAON, the head-quarters of the District, is a small place. The following table shows the chief statistics of population in 1901:—

Zahsīl.		Area is square miles.	Yowns,	Village.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write,
Gurgaon	•••	413	3	207	125,760	304.2	+ 11.0	3,986
Palwal		382	2	187	172,557	451.7	+ 15.3	4,301
Firozpur		317	x	230	132,287	417.3	+ 16.2	2,362
Nüh	•••	403	1	257	145,931	362-1	+ 10.0	2,397
Rewäri	***	426		290	169,673	398.3	+ 5.2	6,397
District Total	•••	*1,984	8	1,171	746,208	376.1	+ 11'5	19,443

*The only figures available for the areas of tahsils are those derived from the revenue returns, and the tahsil densities have been calculated on the areas given in the revenue returns for 1900-01. These returns do not always cover the whole of the country comprised in a tahsil, and hence the total of the tahsil areas does not agree with the district area as shown in the Census Report of 1901, in the table above and on page 39, which is the complete area as calculated by the Survey department. The tracts not included in the revenue survey are as a rule uninhabited or very sparsely populated.

Hindus number 499,373 or 67 per cent., and there are 242,548 Muhammadans. About 85 per cent. of the people return their language as Hindustānī or Urdū; 14 per cent. speak Mewātī, and 2,600 persons Braj.

Their eastes and occupations. The Meos (129,000), who number one-sixth of the population, are probably almost pure aborigines, of the same stock as the Minas of the Aravalli hills, though perhaps with an admixture of Rajput blood. They hold large tracts of land in the southern

portion of the District, and are now without exception Muhammadans, though retaining many Hindu customs. The tribe has laid aside its former lawless turbulence; and the Meos, though still thriftless, extravagant and lazy, now rank among the most peaceable communities in the Punjab. The Jats (77,000) live chiefly in Palwal and the northern parganas: they are almost entirely Hindus. Some of their villages worthily sustain the general high reputation of the tribe, but others are reported to be ill-cultivated. The Ahirs (78,000) form the bulk of the population in Rewari, and are justly esteemed for the skill and perseverance with which they have developed the naturally poor resources of that sterile region. They are all Hindus. The Gujars (25,000) are practically all Hindus. The Rajputs comprise 18,000 Hindus and 9,000 Muhammadans. The Gaurwas (4,000) are Rajputs who have adopted widow re-marriage. The Khānzādas (4,000) claim descent from Jadon Rajputs, converted by Firoz Shah who made them rulers of Mewat. It is possible that they are akin to the Meos, some of whom profess to have been formerly Khānzādas; if so, they may be the representatives of the upper, as the Meos of the lower classes of the aboriginal population. The Malis (market gardeners) number 11,000. The Saiyids (3,000) and Baluchis (2,000) bear a bad name as indolent and thriftless cultivators, and swell the returns of crime far beyond their just proportion. The criminal class of Mīnās (800) are notorious for their thieving propensities. The chief of the commercial tribes are the Banias (37,000). Of the menial tribes the most important are the Chuhras (scavengers, 21,000). Jhīnwars (water-carriers, 12,000), Kumhārs (potters, 16,000), Lohārs (blacksmiths, 7,000), Nais (barbers, 14,000), Kassābs (butchers, 17,000), Tarkhans (carpenters, 13,000) and Telis (oilmen, 7,000). There are 26,000 Fakirs. About 60 per cent.

GURGAON DISTRICT.

The Society for the Propagation of the Gospel Mission has Christian branches at GURGAON and REWARI, with dispensaries at the missions. latter place and at Palwal. In 1901 the District contained 221 native Christians.

The Jumna in Gurgaon, as elsewhere, is fringed by a strip General of alluvial land, the khādar, which leads to the broad level agricultural plain, known as the tangar. Here the soil is almost uniformly conditions. a good loam. Towards the hills the plain sinks into a shallow depression of clayey soil, the dabar, which receives the drainage of the higher ground. West of the hills the ground is broken by rocky knolls and sandhills, while even in the level parts the soil is much lighter than that of the bangar.

of the population are dependent on agriculture.

GURGAON DISTRICT. The District is held almost entirely on the pattidāri and thaiyāchāra tenures, though zamīndāri lands cover 9,000 acres.

Chief agricultural statistics and principal crops, The area for which detai's are available from the revenue records of 1903-04 is 1,941 square miles, as shown below:—

	Tahsil.		Total.	Cultivated.	Irrigated.	Culturable waste.
Gurgaon	***	46.	413	299	43	37
Palwal	***		382	314	130	40
Fīrozpur	650	•••	317	259	49	7
Nüh	***		403	3:9	72	23
Rewāri	114		426	365	106	23
	Tctal	***	. 1,941	1,566	400	130

The chief crops of the spring harvest are gram and barley, which occupied 71 and 167 square miles, respectively, in 1903-4. Wheat occupied 68 square miles. In the autumn spiked millet is by far the most important crop, and occupied 347 square miles. Next come pulses (275 square miles), great millet (111 square miles) and cotton (86 square miles). There is little sugarcane (12 square miles only), and practically no rice.

Improvements in agricultural practice. The cultivated area has increased but slightly since the settlement of 1872-83, being 1,566 square miles in 1903-04 as compared with 1,555 at settlement, and as four-fifths of the total area is now under cultivation, no great extension is to be expected, or could be possible without unduly reducing the area available for grazing. Little attention is paid to any regular course of cropping. Unmanured land is generally cultivated only for one harvest, and the rest it gets during the other harvest is thought sufficient. Great millet is not sown in the same land two years in succession. Cotton is not sown after spiked millet. In all other cases, in deciding what crop to sow, regard is paid

to the kind of soil and amount of rainfall without any con- GURGAON sideration as to what the previous crop was. Advances for con- DISTRICT. structing wells under the Land Improvement Loans Act are fairly popular, Rs. 67,000 having been advanced during the 5 years 1900-1904. During the same period 2.8 lakhs were advanced under the Agriculturists' Loans Act for the purchase of bullocks and seed.

As might be expected from the small proportion of land Cattle, ponies uncultivated, grazing is scarce, and Gurgaon is not a great cattle-breeding District. A cattle fair is held at Rewari. The ponies and sheep are of no special importance. District board has 2 pony and 2 donkey stallions. Large numbers of goats are grazed on the hills: they are frequently owned by butchers who make them over to shepherds on condition of receiving a certain share, generally a half, of the increase.

Of the total area cultivated in 1903-04, 400 square miles, or 25 Irrigation. per cent., were classed as irrigated. Of this area 222 square miles were irrigated by wells, 152 by canals and 25 by streams, tanks and embankments. The District has 9,208 wells in use, all worked by cattle on the rope and bucket system, besides 3,511 unbricked wells, lever wells and water lifts. Canal irrigation is entirely from the AGRA CANAL, which traverses the eastern portion of the District. The third main source of irrigation is the collection of the water of the hill-torrents by means of embankments. These are maintained by the District board, and the total area irrigated from them doubled in the 20 years 1881-1901. On the other hand, owing to the diminution of water in the Sāhibi, Indori and Landoha streams, the lowlying flooded area has considerably decreased.

The only forests are about one square mile of unclassed Forests. forest and Government waste under the control of the Deputy Commissioner. As a whole, the District is not well-wooded, and some parts, such as the lowlying tracts in Nuh tahsil, are extremely bare. In Rewari the tamarisk is especially common, and the ownership of these trees in waste lands and along village roads is often distinct from that of the soil. Palwal is by far the best wooded tahsil, and most of the Jat villages in it reserve a certain portion of their area from the plough.

The Sulfanpur salt sources lie in 6 villages, 5 in this Minerals. and I in Rohtak District. The salt is made entirely from natural brine, 43 wells of which were worked in this District in 1903-04. The brine is about 26 feet below the surface

GURBAON. DISTRICT. and 15 feet deep, and the supply seems inexhaustible, as some of the works have existed for over 200 years. The salt, known as Sultānpurī, is, however, of poor quality, and the demand for it is dying out. Saltpetre is extracted from the earth of old sites and refined at HODAL. Iron ore exists in the hills, but its manufacture has long been abandoned owing to the scarcity of fuel. Traces of copper exist and mica is occasionally extracted. Plumbago has been found, but is too impure to be of any commercial value. A little gold is sometimes washed out of the sand of the hill-torrents. Excellent slates are quarried in the neighbourhood of Rewāri.

Arts and manufactures. Coarse cotton and woollen fabrics are made in the villages. Muslin is woven at Rewārī, but there is little trade in it. The chief industry is the brass manufacture of Rewārī; the greater bulk of the outturn consists of cooking utensils, but articles decorated with chasing, engraving and parcel tinning are also produced for export. Glass bangles are made at Sohna, shoes at Jharsa, Sohna and other places, and iron vessels at Fīrozpur-Jhirka and at Dārāpur and Tānkrī in Rewārī tahsīl. There are two factories for ginning cotton, one at Palwal and one at Hodal, employing 268 hands in 1904. There is an out-still for the distillation of spirit at Fīrozpur-Jhirka.

Commerce.

Trade centres in the town of REWARI, which ranks as one of the chief emporiums in the Punjab. Its merchants transact a large part of the commerce between the States of Rājputāna and Northern India. Salt from the Sāmbhar Lake and iron are the principal imports; while sugar, grain and English piecegoods compose the staple exports. Hardware of brass, coated with white metal, is also largely exported. The District produces cereals and pulses considerably beyond its needs for home consumption, and of late years, owing to the extension of railway communication, a steady export trade in grain has sprung up. Besides Rewāri, Nūh, Fīrozpur-Jhirka, Palwal, Hattīn, Nagīna, Punahāna, Hodal, Hasanpur and Farrukhnagar are the chief marts for country produce, the last-named being also the market for the Sultānpurī salt.

Railways and roads.

The Rājputāna-Mālwā Railway from Delhi to Ajmer crosses the District with a branch line to Farrukhnagar, and the Bhatinda line leaves it at Rewāri, which is an important junction. The Agra-Delhi chord of the Great Indian Peninsula Railway, opened in 1904, runs through the east, and the Rewāri-Phulera line through Rewāri tahsil.

The Grand trunk road from Delhi to Agra traverses Palwal tahsīl, and there is a metalled road from Gurgaon to Sohna, 15 miles, which is to be carried 6 miles further on to Nuh. A metalled road also runs from Firozpur-Jhirka through Nagauna into Alwar State. The roads of greatest mercantile importance are, however, still unmetalled, very heavy and difficult to traverse in the rains. The total length of metalled roads is 81 miles, and of unmetalled 509. Of these 30 miles of metalled road are under the Public Works department, and the rest are maintained from local funds. The Jumna is navigable for country craft throughout its course, and is crossed by 8 ferries.

GURGAON DISTRICT.

As might be expected in a District so largely dependent, until Famine. lately, on the rainfall, Gurgaon has suffered severely in all the famines that have visited the Punjab. The chālīsa famine of 1783-84 was very disastrous, and in the famines of 1833-34 and 1837-38 a number of estates were deserted, partly on account of high assessments and partly from too stringent collection in the famine. The effects of the famines of 1860-61 and 1868-60 were greatly mitigated by the relief afforded by Government. In the latter year, the first for which we have full reports, 344,527 daily units were relieved, and 15,324 employed on works, with a total expenditure of Rs. 11,139. The famine of 1877-78, in conjunction with a new and excessive assessment of land revenue and an unsympathetic revenue administration, badly crippled the District for some time; the maximum number under relief on any one day was 2,155, while 313 deaths from starvation were reported, and 150,000 head of cattle died. There was scarcity in 1884. In 1896-97 the famine was by no means severe as irrigation from the Agra Canal had been developed, and a much larger measure of protection insured. Distress lasted from January to May 1897, and affected none but the menial classes. The daily average of persons relieved in no week exceeded 3,100, and the total cost was only Rs. 14,070. In the famine of 1899-1900, 1,033 square miles, or 53 per cent. of the total area, was affected; the greatest daily average in receipt of relief was 18,153, or 5 per cent. of the population affected, and the total expenditure was 3.8 lakhs.

The District is divided for administrative purposes into 5 District subtahsils, Gurgaon, Firozpur, Nuh, Palwal and Rewari, each divisions and under a tahsildar and naib-tahsildar. It is in charge of a Deputy Commissioner, who has under him two Assistant or Extra Assistant Commissioners, one being in charge of the District treasury.

GURG AON DISR TICT.

Law and justice.

The Deputy Commissioner as District Magistrate is responsible for the criminal justice of the District: civil judicial work is under a District Judge. Both officers are under the control of the Divisional and Sessions Judge of the Delhi Civil Division. There is only one Munsif under him, who sits at head-quarters. The predominant forms of crime are cattletheft and burglary.

Land revenue administration.

A notable feature in the system of land tenures is the redistribution of the land among the communal proprietors. custom has survived in a few villages, but is dying out. fiscal history is a melancholy one. As each pargana came under British rule, it was either summarily settled, or else the Collector managed the whole as a single estate, and made from it what collections he could, no regular engagement being entered into with the proprietors. Regular settlements began in 1836-37, and by 1842 every pargana had been dealt with. The working of this settlement, though very uneven, was satisfactory on the whole. The rapid rise in prices which continued to the end of the decade helped to mitigate the severities of the assessment. Thus by the time prices fell in the next decade, increased cultivation and irrigation had put the people in a better position to fulfil their engagements.

The revised settlement was carried out between 1872 and 1883. The increase in cultivation was estimated at 40 per cent, while the increase taken in revenue was only 17 per cent. The new settlement, however, was most unfortunate in the opening seasons of its term. The autumn harvest of 1877 was a complete failure, and the local officials recommended the suspension of the entire instalment, but sanction was refused on the ground that proprietors whose revenue had just been raised must be in a position of affluence and therefore able to pay in a bad year as well as in a good. The result was widespread distress, and collection of the revenue in full proved impossible. Moreover, it was not until 1882 that counsels of leniency prevailed, and by that time pestilence and famine had stamped upon the people an impress of poverty which years of prosperity could hardly remove. The assessment was lowered by nearly 8 per cent, for a term of 7 years, and permanently by 4 per cent. At the expiry of the term in 1889 the larger reduction was made permanent, and though the years 1890-1895 were years of plenty, they were overshadowed by the famine lustrum that followed. The District came under re-settlement in 1903. The average assessment on dry land is R. 1-0-6 (maximum R, 1-12 and minimum 9 annas), and that on wet land is Rs. 2-8

(maximum Rs. 3-8 and minimum R. 1-8). The demand, including cesses, in 1903-04 was nearly 14 lakhs. The average size of a proprietary holding is 3 7 acres.

GURGAON DISTRICT.

The total collections of revenue and those of land revenue alone are shown below, in thousands of rupees :-

•		1880 81.	1890 91.	1900-01.	1903-04.
Land Revenue	•••	12,42	11,43	10,12	11,31
Total Revenue		13,68	13,17	12,97	14,32

The District contains 6 municipalities, REWARI, FARRUKH Local and NAGAR, PALWAL, FIROZPUR, SOHNA and HODAL, besides 4 municipal. notified areas. Outside these towns local affairs are managed by a District board, whose income amounted to Rs. 1,24,000 in 1903-04. Its expenditure in that year was Rs. 1,46,000.

The regular police force consists of 520 of all ranks, of whom Police and 117 are municipal police and is under a Superintendent, who is jails, usually assisted by 2 Inspectors. The village watchmen number 1,428. The District contains 15 police stations, I outpost and 13 road posts. There is no jail in the District, and the convicts are sent to Delhi District jail. The Minas and Baurias are proclaimed under the Criminal Tribes Act, and 908 were on the register in 1901.

The District stands 27th among the 28 Districts of the Education, Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 2.6 per cent. (4.9 males and i females). The number of pupils under instruction was: in 1880-81, 3,199; 1890 91, 4,696; 1900-01, 5,139; and 1903 04, 5,563. In the last year the District possessed 7 secondary and 108 primary public schools, and 17 elementary private schools, the number of female scholars being 347 in the public and 105 in the private schools.

Of the public schools II were supported by municipalities Education. and 18 received a grant-in-aid, the remainder being maintained by the District board. The only high school is an anglovernacular municipal school at Rewari, managed by the Education department. The special schools include two for low-caste boys, and one industrial school for boys and another for girls. To encourage education among the criminal

GURGAON DISTRICT. tribe of Mīrās, stipends of from R. 1 to Rs. 3 per month are offered to boys of this class to support them at school. The total expenditure on education in 1903-04 was Rs. 51,000, of which Government contributed Rs. 2,000, municipalities Rs. 15,000, District funds Rs. 25,000, and fees Rs. 8,000.

Hospitals and dispensaries.

Besides the Gurgaon dispensary the District has 8 outlying dispensaries. At these institutions in 1904 77,889 out-patients and 1,716 in-patients were treated, and 3,707 operations performed. The expenditure in the same year was Rs. 24,000, of which Rs. 13,000 was derived from local funds and the bulk of the remainder from municipal funds. The expenditure on establishment was Rs. 10,000 and on medicines Rs. 3,000. The Society for the Propagation of the Gospel has a dispensary in charge of a lady doctor at Rewari and another at Palwal.

Vaccination.

The number of successful vaccinations in 1903-04 was 23,697 or 31.76 per thousand of the population. Vaccination is compulsory in Rewaii.

[J. Wilson, Codes of tribal custom of twenty-one tribes in the Gurgaon District, 1882; D. C. J. Ibbetson, District Gazetteer, 1884; F. C. Channing and J. Wilson, Settlement Report, 1882.]

Gurgaon tahsil.—Tahsil of the Gurgaon District Punjab, lying between 28° 12' and 28° 33' N. and 76° 42' and 77° 15' E., with an area of 413 square miles. Its population was 125,760 in 1901 compared with 112,390 in 1891. It contains the towns of GURGAON (population 4,765), its headquarters, SOHNA (6,024), FARRUKHNAGAR (6,136), and 207 villages; and the land revenue and cesses amounted in 1903-04 to 2.5 lakhs. At annexation the area covered by the present tahsil was occupied by the parganas of Farrukhnagar held by the Nawab of Farrukhnagar, Jharsa held by Begam Sumru, and the greater part of Bahora and Sohna, held by Generals de Boigne and Perron. The two last parganas were resumed at annexation and were brought under British administration in 1808 og. Jharsa lapsed on Begam Sumru's death in 1835, and Farrukhnagar was confiscated owing to the Nawab's complicity in the Mutiny of 1857. Dams are built across the torrent beds which decend from the low rocky hills in the centre and east and the water is stored up for irrigation. In the north, the soil is a rich mould; in the south sand predominates; while in the north-west, in the neighbourhood of Farrukhnagar, the sand ridges are separated by depressions of soil where the water collects in seasons of heavy rainfall.

Palwal Tahsil.—Tahsil of the Gurgaon District, Punjab, lying between 27° 51' and 28° 16' N. and 77° 11' and 77° 34' E., with an area of 382 square miles. It is bounded on the east and south by the United Provinces, the river Jumna forming the eastern boundary. Its population was 172,557 in 1901, compared with 149,740 in 1891. It contains the towns of PALWAL (population 12,830), the head-quarters, HODAL (8,142), and 187 villages; and the land revenue and cesses amounted in 1903 04 to 3'2 lakhs. The parganas of Palwal and Hodal which make up the present tahsil were once held by General de Boigne. They were assigned by the British Government, and lapsed on the deaths of the assignees in 1813 and 1817. The tahsil is well wooded and consists of a fertile plain watered by the Agra canal.

GURGAON DISTRICT.

Firozpur Tahsil-Tahsil of the Gurgaon District, Punjab, lying between 27° 39' and 28° 1' N. and 76° 53' and 77° 20' E., with an area of 317 square miles. It is bounded on the north-east by the Nuh and Palwal tahsils, on the south-east by the Muttra District, in the United Provinces, and the Bharatpur State, and on the west by Alwar State. Its population was 132,287 in 1901, compared with 113,874 in 1891. It contains the town of FIROZPUR-JHIRKA (population 7,278), its head-quarters, and 230 villages; and the land revenue and cesses amounted in 1923-04 to 2.7 lakhs. The parganas of Firozpur and Punāhāna which make up the present tabsil were assigned for good service to Ahmad Bakhsh Khān, but they were forfeited by his son for complicity in the murder of Mr. William Frasemin 1836. Of the two ranges of bare and rocky hills which extend northwards into the tahsil, one forms the western boundary and the other runs north-east for 25 miles and then sinks into the plain. The soil in the low-lying parts of the tahsil, which are liable to be flooded after heavy rains, is a sandy loan,

Nuh (Noh).—Tabsīl of the Gurgaon District, Punjabilying between 27° 53′ and 28° 20′ N. and 76° 51′ and 77° 19′ E., with an area of 403 square miles. It is bounded on the west by Alwar State. Its population was 145,931 in 1901, compared with 131,593 in 1891. The tahsīl contains the village of Nūh, its head-quarters, and the town of Hattīn (4,301) with 257 villages, and the land revenue and cesses amounted in 1903-04 to 29 lakhs. Of the parganas which make up the greater part of the present tahsīl, Nūh was brought under British rule in 1808, Hattīn in

GURGAON DISTRICT. 1823, and Taoru (which had been assigned to Bharatpur) after the Bharatpur war in 1826. The high plateau of Taoru is separated from the low-lying tract round Nüh by a low range of hills. To the east the country is undulating and water collects in the hollows.

Rewari Tahsil (Riwari).-Tahsil of Gurgaon District, Punjab, lying between 28° 5' and 28° 26' N. and 76° 18' and 76° 52' E., with an area of 426 square miles. It is almost entirely detached from the rest of the District, and is bounded on three sides by Native States. The isolated pargana of Shahjahanpur. situated to the south in Alwar territory, is also included in this tahsil. Its population was 169,673 in 1901, compared with 161,332 in 1801. It contains the town of REWARI (population 27,295), its head-quarters, and 200 villages, and the land revenue, including cesses, amounted in 1903-4 to 3'2 lakhs. Rewari formed during the 18th century a semi-independent principality under a family of Ahir chiefs. On the cession of the country to the British the revenue was first farmed by the Rājā of Bharatpur and then by the Ahir chief of the day. It was taken over by the British Government in 1808. Shahjahanpur belonged to the Chauhan Rajputs until the Haldias, dependents of Jaipur, wrested it from them in the 18th century. It lapsed to the British Government in 1824. The tahsil consists of a sandy plain, the monotony of which is varied towards the west by irregular rocky hills of low elevation. The Kasauli on the extreme west and the Sāhibī on the east are two torrents which contribute largely to the fertility of the land along their banks. In other parts there is copious well irrigation.

Farrukhnagar.-A town in the Gurgaon tahsil and District, Punjab, situated in 28° 27' N. and 76° 50' E., on a branch of the Rajputana-Malwa Railway, 14 miles from Gurgaon. Population (1901) 6,136. It is the depôt for the salt extracted from saline springs in the neighbourhood, but the industry has greatly declined of late years and threatens soon to be extinct altogether. Farrukhnagar was founded by a Baloch chief, Faujdar Khan, afterwards Dalel Khan, who was made governor by the emperor Farrukh Siyar. He assumed the title of Nawab in 1732, and the Nawabs of Farrukhnagar played an important part in the history of the tract for the next 70 years. Farrukhnagar was captured by the Jats of Bharatpur in 1757, but recovered in 1764. On annexation the Nawabs were confirmed in their principality, but it was confiscated in 1858 for the complicity of the reigning chief in the Mutiny. The chief buildings are the Delhi gate, the Nawāb's palace and a fine mosque, all dating from the time of Gurgaon Faujdār Khān; also a large octagonal well belonging to the DISTRICT period of Jat occupation. The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 6,400 and expenditure Rs. 5,900. The income for 1903-04 was Rs. 6,800, chiefly derived from octroi, and expenditure Rs. 10,600. It maintains a Government dispensary.

Firozpur-Jhirka.-Had quarters of the Firozpur tahsil in the Gurgaon District, Punjab, situated in 27° 47' N. and 76° 58' E., 50 miles due south of Gurgaon. Population (1901) 7,278. Formerly a trade centre for cotton, it has been ruined by the absence of railway communications. It has an out-still for the distillation of spirit. It is said to have been founded by Firoz Stah III as a military post to control the Mewātīs. It was from 1803 to 1836 the seat of the Nawals of Firozpur, to whom the present tahsil had been granted on annexation. The municipality was created in 1267. Its average income and expenditure for the 10 years ending 1902-03 were Rs. 7,400 and 7,100 resp ctively. The income for 1903-04 amounted to Rs. 6,600, chiefly derived from octroi, and expenditure to Rs. 7,800. It maintains a vernacular middle school and a dispensary.

Gurgaon Town.—Head-quarters of the Gurgaon tahsil and District, Punjab, situated in 28° 29' N. and 77° 2' E., 3 miles from Gurgaon railway station on the Raiputana-Malwa Railway. Population (1901) 4,765. It is of no commercial or historical importance. Gurgaon is also known as Hidayatpur, the village where at annexation a cavalry cantonment was located in order to watch the Begam Sumru's troops at Jharsa. The civil head-quarters of the District were transferred here in 1816. Its name is taken from the neighbouring village of Gurgaon-Masāni, where there is a temple of Sitla, goddess of small-pox, which is visited annually by 50,000 or 60,000 people. The town is administered as a notified area, and contains a vernacular middle school and a dispensary.

Hodal.—Town in the Palwal tahsil, Gurgaon District, Punjab, situated in 27° 53' N. and 77° 23' E, on the Grand trunk road between Delhi and Muttra, and on the Delhi-Agra branch of the Great Indian Peninsula Railway. Population (1901) 8,142. A cotton-ginning factory gave employment to 61 persons in 1904, but the town has little trade. Saltpetre is refined here to a certain extent. The Jat chief, Suraj Mal, was connected by marriage with the Jats of Hodal, and there are

GURGAON DISTRICT. the remains of several fine buildings erected by him. The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 6,100 and expenditure Rs. 5,000. The income for 1903-04 amounted to Rs. 6,300, chiefly derived from octroi, and expenditure to Rs. 7,300. It maintains a Government dispensary.

Palwal Town .- Head-quarters of the Palwal tahsil. Gurgaon District, Punjab, situated in 28° 9' N. and 27° 20' E., on the Grand trunk road between Delhi and Muttra, and a station on the Delhi-Agra branch of the Great Indian Peninsula Railway. Population (1901) 12,830. A good road leads to Sohna (17 miles), whence the road is metalled to Gurgaon. Palwal is a depôt for the cotton of the surrounding country, and a cotton-ginning factory has recently been set up, which employed 207 hands in 1904. Hindu tradition identifies Palwal with the Apelava of the Mahābhārata which is said to have been restored by Vikramāditya. The mosque at Palwal is supported by pillars, which bear traces of Hindu idols defaced in the time of Altamsh in 1221. An elegant domed tomb of red sandstone, just outside the town on the Muttra road, is said to have been built by a fakir, who levied an impost for this purpose of one slab on every cart-load of stone which passed from Agra to Delhi for the building of the fort of Salimgarh. The municipality was created in 1867. Its average income and expenditure for the 10 years ending 1902-03 were Rs. 15,000 and 14,700 respectively. The income for 1903-04 was Rs. 16,800, chiefly derived from octroi. and expenditure Rs. 22,100. It maintains a vernacular middle school and a dispensary.

Rewāri Town (Riwāri).—Head-quarters of the Rewāri tahsīl in the Gurgaon District, Punjab, situated in 28° 12′ N. and 76° 38′ E., on the Delhi and Jaipur road, 32 miles southwest of Gurgaon, and the junction of the Rewāri-Bhatinda branch and the main line of the Rājputāna-Mālwa Railway. It is distant by rail from Calcutta 1,003 miles, from Bombay 838, and from Karāchi 904. Population (1901) 27,295, including 14,702 Hindus and 11,673 Muhammadans. Rewāri was formerly a halting place on the trade road from Delhi to Rājputāna, celebrated for the manufacture of brass and pewter. These manufactures are still carried on, but since the opening of the railway the chief importance of the town lies in its trade in grain and sugar, which it sends westward, while salt and iron (imported from Alwar) are sent to the United Provinces of Agra and Oudh.

The ruins of old Rewari which local tradition connects with a nephew of Prithwi Raj, lie some distance to the east of the present town, said to have been built about 1000 by Raja Reo or Rawat who called it after his daughter Rewati. Under the Mughals, Rewari was the head-quarters of a sarkar, but its Raja seems to have been almost independent. In the reign of Aurangzeb the town and territory of Rewari were obtained by a family of Ahirs, who held them until the annexation by the British. Rewari was brought directly under British administration in 1808-00, and the village of Bharawas in its vicinity was until 1816 the head-quarters of the District. The municipality was created in 1867. Its average income in the 10 years ending 1002-03 was Rs. 56,300 and expenditure Rs. 58,100 income for 1903-04 amounted to Rs. 48,800, chiefly derived from octroi, and expenditure to Rs. 56,400. Rewari contains the only high school in the District managed, by the Education department. The town has a Government dispensary and another belonging to the P. G. Mission in charge of a lady doctor.

DISTRICT.

Sohna (Sonāh).—Town in the Gurgaon tahsīl and District, Punjab, situated in 28° 15' N. and 77° 5' E., 15 miles south of Gurgaon. Population (1901) 6,024 It is of no commercial importance, but claims considerable antiquity. It has been occupied in succession by the Kambohs, the Khanzādās and the Rājputs, and traces of all three settlements are found in the extensive ruins which surround it. The town was taken in the 18th century by the Jats of Bharatpur, who built a large fort, now in ruins. It has a mosque dating from 1561, and its hot springs are famed for their medicinal properties. The municipality was created in 1885. Its average income and expenditure for the 10 years ending 1901-03 were Rs. 5,800 and 5,900 respectively. The income for 1903-04 was Rs. 4,800, chiefly derived from octroi, and expenditure Rs 5,800. It possesses a vernacular middle school and a dispensary.

Delhi District (Dehli or Dilli) .- A District in the DELHI Punjab comprising an area of 1,290 square miles, lying between DISTRICT. 28° 12' and 29° 14' N., and 76° 48' and 77° 31' E. The name Boundaries should be written Dilli or Dhili, and is said to be derived from configuration, and enonymous Rais Bill or Dhily. The District is bounded and hill and an eponymous Raja Dilu or Dhilu. The District is bounded on river system, the north by the Karnal District; on the east by the river Jumna, which separates it from the Districts of Meerut and Bulandshahr in the United Provinces; on the south by Gurgaon; and on the west by Rohtak. The northern portion, like most

Delhi District. of the alluvial plains of upper India, is divided into the khādar. or riverain, a strip of land adjoining the Jumna, and the drier and more sandy uplands known as the bangar. Though monotonous in appearance, this latter tract is well wooded, and, being traversed by the Western Jumna Canal, is fertile in the extreme. A prolongation of the Aravalli hills enters the District from Gurgaon on the southern border, and immediately expands into a rocky table-land, about three miles in breadth, running in a north-easterly direction nearly across the District. Ten miles south of the city the range divides into two branches, one of which, turning sharply to the south-west, re-enters the borders of Gurgaon; while the other continuing its northerly course as a low, narrow range of sandstone, passes west of Delhi city, where it forms the historic ridge, and finally terminates on the right bank of the Jumna. The table-land nowhere attains an elevation of more than 500 feet above the lowlands at its base; but its surface consists of barren rock, too destitute of water for the possibility of cultivation, even in the few rare patches of level soil. The Jumna, before reaching the borders of the District, has been so completely drained of its waters for the two older canals which it feeds, that it forms only a narrow stream, fordable at almost any point, except during the rains.

Geology.

The greater part of the District lies on the alluvium, but the small hills and ridges, which abound to the south of Delhi, consist of outliers of Alwar quartzite belonging to the Delhi system of the transition group of pointsular India. The ridge at Delhi is composed of the same rock.*

Botany.

The natural vegetation is that of the drier parts of the upper Gangetic plain, with an element akin to that of northeast Rājputāna, while traces of an ancient Deccan flora are tound on and near the low spur which ends in the ridge at Delhi. The mango and other sub-tropical species are cultivated in gardens and along canals and road-sides, but large trees, except where planted, are comparatively scarce, and the kinds that reproduce themselves spontaneously are probably, in most cases, not natives of the District.

Fauna.

Wolves are not uncommon and leopards are occasionally met with. Hog are plentiful all along the banks of the Jumna. Black buck are becoming scarce, while nilgai and hog-deer are practically extinct. Ravine deer are found in the low hills.

^{*} See Hucket, Geology of the Aravali region. Records, Geol., Survey of India. xiv, part 4.

The cold weather is much like that of the Punjab proper, but ends a fortnight sooner than it does at Lahore. Hot Climate and west winds blow steadily till the end of June, when plentiful temperature, rain is expected. October brings cool nights and the beginning of the feverish season, which is always very unhealthy. The average mean temperature of January is 57°, of April 85°, of June 97° and of September 87°.

The average rainfall varies from 211 inches at Ballabgarh Rainfall, to 28 at Delhi; of the rainfall in the latter place 25 inches fall in the summer months, and 3 in the winter. The greatest annual rainfall recorded during the years 1881-1901 was 48 inches at Delhi in 1884-85, and the least 1th of an inch at Mahrauli in 1896-97.

The history of the District is the history of the city of History. DELHI, of which it has from time immemorial formed a dependency Even the towns of SONEPAT, BALLABGARH and FARIDABAD hardly possess local histories of their own, apart from the city, in or around which are all its great antiquities.

The tract conquered by the East India Company in 1803 included a considerable strip to the west of the Jumna both north and south of the Mughal capital. A few native princes, however, still held independent estates within the Delhi territory, the principal in the present District being the Raja of Ballabgarh. As early as 1819 a District of Delhi was regularly constituted. It included a part of the present Rohtak District, and in 1832 the administration of the Delhi territory. nominally as well as actually, was placed in the hands of the East India Company. The territory continued to form part of the North-Western-now the United-Provinces till the Mutiny of 1857.

On the outbreak of the Mutiny the whole District passed into the hands of the rebels; and though communications with the Punjab were soon restored, and the northern parganas recovered, it was not till after the fall of Delhi city that British authority could reassert itself in the southern portion. When the final suppression of the Mutiny enabled the work of reconstruction to proceed, the District was transferred to the Punjab. At the same time the territories of the insurgent Raja of Ballabgarh, who had been executed for rebellion, were confiscated and added as a new tahsil to the District; while the outlying villages of the Doab, hitherto belonging to Delhi. and known as the eastern pargana, were handed over to the North-Western Provinces.

DELHI DISTRICT.

The people.

The District contains 4 towns and 714 villages. Its population at each of the last three enumerations was: 1881, 643,515; 1891, 638,689; 1901, 689,039 It increased by 7.8 per cent. between 1891 and 1901, the increase being greatest in the Delhi tahsil (8.9) and least in Ballabgarh (5.9). It is divided into the 3 tahsils of Delhi, Sonepat and Ballabgarh, the head-quarters of these being at the places from which each is named. The chief towns are the municipalities of DELHI, the head-quarters of the District, SONEPAT, BALLABGARH and FARIDABAD. The following table shows the chief statistics of population in 1901:—

Tahsīl.	Area in square miles,	Lowns,	Villages.	Population.	Population per square mile,	Percentage of variation in population between 1891 and 1901	Number of persons able to read and write.
Delhi	429	1	243	3*9,008	8368	+ 8.9	21,854
Sonepat	455	1	224	203,338	446.9	+ 73	6,445
Ballabgarh	385	2	247	126,693	329.1	+ 5'9	3,271
District Total	* 1,290	4	714	689,039	534 1	+ 7.8	31,570

^{*} The only figures available for the areas of tahsils are those derived from the revenue returns, and the tahsil densities have been calculated on the areas given in the revenue returns for 1900-1. The total of the tahsil areas does not agree with the District area as shown in the Census Report of 1901, in the table above and on page 55, which is the complete area as calculated by the Survey department. The differences are due in some cases to the exclusion of certain areas from the revenue survey and in some to the differences in the survey methods employed.

Hindus number 510,532, or more than 74 per cent. of the people, Muhammadans 167,290 and Jains 7,726. The people of Delhi city share with Lucknow the reputation of speaking the most elegant form of Hindustani or Urdū.

Their castes and occupa-

The Jats are the chief land-owning tribe numbering 114,000, and are almost entirely Hindus. Those of the south of the District centre about Ballabgarh and their traditions are con-

nected with the Jat Rajas of that place. Those of the north DELHI are divided into two factions: the Dahiyas, who trace their DISTRICT. descent from a grandson of Prithwi Raj, Dhanij by name, and a sat woman: and the Ahū'anas, who say that their forebears came from Rājputāna. The Gūjars (28,000) are nearly all Hindus; they have a bad reputation as thieves, and levy a kind of blackmail on the residents of the civil station by ensuring that the rash householder who does not employ a Gujar watchman will infallibly have his house robbed. The Tayās (9,000) say that they were once Brāhmans, and derive their name from the fact of their having abandoned (tyāga) the practice of mendicancy. They are of the Gaur family, and their tradition is that they were invited from Bengal for the purpose of exterminating snakes. Sir H. Elliot finds in this story an allusion to wars against 'Takshaka Scythians' of a Buddhist creed. The Ahirs (14,000) are all Hindus and claim a Rajput origin. They are excellent cultivators. The Rajputs (24,000) are mostly Hindus, but Muhammadans. The District contains 62,000 4,000 are Brāhmans, 71,000 Shaikhs, and 8,000 Meos. The Banias (47,000) are the most important of the commercial classes, but there are 5,000 Khattris. Of the menials may be mentioned the Chamars or leather-workers (66,000), the Chahras (27,000) and Dhanaks who are scavengers (6,000), the Jhinwars or water-carriers (17,000), the Kumhars or potters (14,000), the Lohars or blacksmiths (6,000), the Nais or barbers (11,000), the Kassabs or butchers (6,000), and the Tarkhans or carpenters (0,000). As is natural in a District containing so large a city, only 41 per cent. of the total population are supported by agriculture, while 29 per cent. are industrial, 6 commercial and 3 professional.

The Mission of the Society for the Propagation of the Christian Gospel was established at Delhi in 1854, and reinforced in 1877 by the Cambridge Mission—a body of graduates of Cambridge living and working together as a brotherhoodwho, with the original body, form one mission under the name of the S. P. G. and Cambridge Mission in Delhi and the South Punjab. Among the institutions managed by this united body are St. Stephen's Mission College, a high school, with 6 branches and 700 boys, and other schools, a hospital for women, a Christian girls' boarding school and industrial school, and St. Mary's Home for convalescent converts and teachers. The first Baptist Missionary in Delhi was John Chamberlain, tutor to the son of Begam Sumrū, who visited the city in 1814, but Delhi was not recognised as a mission station till 1818. In the operations of the Baptist

DELHI DISTRICT. Mission are included a training institution, dispensary, school, Zanāna Mission and girls' school. Of every 10,000 persons in the District 46 are Christians. In 1901 it returned 2,042 native Christians.

General agricultural conditions.

North of the city the District is divided into two portions,—the low lying riverain khādar lands near the Jumna and the higher upland, or bangar lands now removed from the influence of the river. In the khādar, where the soil is light and sandy, irrigation from wells is easy, and this tract mainly depends on the spring harvest. The bangar is traversed by the Western Jumna Canal and, until the recent realignment. suffered severely from swamping; in its unirrigated portions the autumn harvest is naturally the more important, and south of Delhi the riverain strip is very narrow. In the lands lying just under the hills, the soil is light, and irrigation is chiefly carried on by dams which hold up the mountain torrents. Round the Najafgarh *ihil* and in the extreme south are blocks of land, inundated in the rains, with a light soil and water near the surface. Since the Najafgarh jhil was drained, cultivation on its borders has ceased to be as profitable as formerly.

Chief agricultural statistics and principal crops, The District is held almost entirely by petty peasant proprietors, large estates covering only 50,000 acres, and about 16,000 acres owned by Government being held on temporary leases. The area for which details are available from the revenue records of 1903-4 is 1,284 square miles, as below:—

Tahsīl.		Total.	Cultivated.	Irrigated.	Cultur able waste.
Delhi •••		429	294	101	71
Sonepat	•••	460	323	194	82
Ballabgarh	•••	3 95	250	27	41
Total	•••	1,284*	867	322	194

* See note to table on page 58.

The chief crops in the spring harvest are gram and wheat, which occupied 36 and 159 square miles respectively in that year; barley occupied 47 square miles. In the autumn

spiked millet occupied 133 square miles, and great millet 114 DELHI square miles, these being the staple food-grains of the DISTRICT. District. Next in importance are cotton (37 square miles), sugarcane (25 square miles), and maize (15 square miles). Sugarcane is the most important and profitable crop of the autumn in the bangar tracts of Delhi and Sonepat; melons are an important crop of the extra spring harvest on the riverside near Delhi.

The cultivated area only increased from 821square miles Improvein 1881 to 867 in 1904, or by slightly more than 5 per cent., and ments in agrithere is little room for further extension. The character of the cultural practice. cultivation has, however, been enormously improved by the remodelling of the WESTERN JUMNA CANAL which has caused the saline efflorescences and water logging, once characteristic of the canal irrigated tracts, to disappear in great measure. The draining of the Najafgarh jhil has also added to the cultivated area, besides vastly improving the physical well-being of the people. A good deal has been done in the way of encouraging the people to take advances for the construction of wells, and 1.2 lakh was advanced under the Land Improvement Loans Act during the five years ending 1904.

The cattle form an important feature of agricultural Cattle, ponies economy, and few Jats do not own a yoke of oxen and a cow and sheep. or buffalo, but the breeds are in no way peculiar. A horse fair is held at DELHI city, but the District does not produce anything beyond the ordinary village pony. The District board maintains I donkey and 2 horse stallions.

Of the total area cultivated in 1903-04 322 square miles or Irrigation. 37 per cent. were classed as irrigated. Of this area 161 square miles were irrigated by wells, 941 acres by wells and canals, and 150 square miles by canals. The new Delhi branch of the Western Jumna Canal traverses Sonepat and the northern part of Delhi tahsīl, and is estimated to irrigate 129 square miles yearly. When the canal was re-opened under British rule, it was aligned for a great part of its length in a valley, and the water-courses were equally ill-constructed, often intersecting one another and running side by side for long distances. The result was that almost irretrievable damage was done by water-logging and saline efflorescences, and the health of the people was seriously impaired. Since 1880, however, the distributing system has been entirely remodelled and about 386 miles of drainage channels constructed. The result has been most encouraging, and water logging with its attendant evils has almost entirely disappeared. A small area is irrigated by

DELHI DISTRICT. the Najafgarh canal, an escape which drains the Najafgarh jhil and is now in charge of the District board. The Agra Canal takes out of the Jumna below Delhi, but flows at too low a level to give much irrigation in this District.

The District contains 0,043 wells besides 1,279 temporary wells, lever wells and water lifts. The Persian wheel is the commonest way of raising water in the north, and the rope and bucket in the south and centre. As there is no scope for the extension of canal irrigation, the chief means of protection against famine is afforded by the construction of new wells.

Forests.

The only forests are 35'9 square mles of unclassed forests and Government waste under the control of the Deputy Commissioner.

Minerals.

Chalk is obtained in small quantities from two villages, where it is dug out of a rude mine, made by sinking a shaft 30 or 40 feet deep, and driving horizontal tunnels. The output is about 15,000 maunds annually. The work is done by menial castes, who get 2½ annas a day for work below, and 1½ or 2 for work on, the surface. Kinkar is quarried in about 125 villages, and a quartz-like building stone is also found. A crystal mine, formerly worked at Arangpur, has long been abandoned. A certain amount of crude saltietre is manufactured; and a saltpetre refinery in Delhi turns out about 2,500 maunds annually.

Manufactures, and trade.

The District possesses no arts or manufactures of any importance except those of DELHI city. Similarly the commerce of the District all centres in Delhi, that of the rest of the District consisting merely in the interchange of agricultural produce for piece goods, iron and other necessaries. Of the 24 factories in the District, which in 1901 employed 3,494 hands, all are in Delhi except a cotton ginning and pressing mill at SONEPAT, where the number of employés in 1904 was 130.

Railways and roads.

Delhi is in connection with 6 railway systems. The East Indian, North-Western and Oudh and Rohilkhand Railways enter it from Ghāziābād junction, crossing the Jumna by an iron bridge. The Delhi-Ambāla-Kālka Railway runs northwards from the city, and the Rājputāna-Mālwa Railway traverses the District for a short distance in the direction of Gurgaon. A line from Delhi to Agra was opened in 1904. The Jumna is navigable during the rainy season, and the Western Jumna Canal, continued as far as Delhi by the Okhla Navigation Cana is navigable all the year round. Good metalled roads connect, the city with Lahore, Agra, Jaipur and Hissār; while a net work

of local trade-lines runs in every direction to the various minor DELHI towns. The District has altogether 143 miles of metalled and 409 of unmetalled roads, all, except 104 miles of metalled and 83 of unmetalled roads under the Public Works department, belonging to the District board. The Jumna is crossed by four ferries, and the railway bridge at Delhi has a sub-way for ordinary wheeled traffic.

The history of famine goes back to the year 1345 in Famine. the time of Muhammad bin Tughlak, when it is recorded that men ate one another. Subsequent famines occurred in 1631, in the time of Shah Jahan; in 1661, under Aurangzeb, a severe famine; in 1739, under Muhammad Shah, famine followed the invasion by Nadir Shah; and again in 1770, 1783-84, 1803-04, 1813-14, and in 1825-26, when the Sonepat tahsil was severely affected and the entire revenue was remitted. In 1832-34 and 1837-38 bread riots occurred, and unlimited relief was offered to those who would work. The famine of 1860-61 was severe and 2.7 lakhs was expended on relief works and gratuitous relief, representing a total number of 12,000 persons relieved for a whole year. The famine of 1865 was not severe in Delhi. In the famine of 1868 60 relief works were provided, and altogether Rs. 14,000 expended, including Rs. 9,000 from private subscriptions. The famine of 1877-78 did not materially affect Delhi. In 1896-97 there was considerable distress, wheat and bajra sold at 73 and 84 seers per rupee, respectively, and more than 3,000 persons were employed on relief works, and about 4,000 received food at kitchens. Scarcity again supervened in 1869-1900, but in spite of unfavourable local conditions the people did not resort to the main relief work provided. District is small; it contains a large city centrally situated, and there is at all times a demand for labour. The greatest daily average of persons relieved was 4,374. Rs. 40,694 were spent in wages on earthwork, and the cost incurred by the municipality

The District is in charge of a Deputy Commissioner, District subaided by 5 Assistant or Extra Assistant Commissioners, divisions and of whom one is in charge of the District treasury. The treasury here is the Bank of Bengal, and there is a currency depôt at the court house. The District is divided into three tahsils, DELHI, SONEPAT and BALLABGARH, each under a tahsīldār and nrib-tahsīldār. Delhi city is also the head-quarters of the Superintending Engineer, Western Jumna Canal Circle, and of the Executive Engineer, Delhi Provincial division.

was Rs. 5,699.

DELHI DISTRICT.

Law and jus-

Civil judicial work is under a District Judge from whom appeals lie to the Divisional Judge of the Delhi Civil Division. He is aided by an Extra Assistant Commissioner, who is solely employed on civil judicial work and may be replaced by a Munsif, a Small Cause Court Judge and one Munsif, besides whom the other Assistant and Extra Assistant Commissioners and the tahsīldārs help in civil judicial work. An honorary Extra Assistant Commissioner works at head-quarters. The civil work, arising mainly out of the large and growing trade of the city, is very heavy. The Divisional Judge is also Sessions Judge of the Delhi Civil Division. There are 16 honorary magistrates, of whom 12 constitute a bench for the city, two sit at head-quarters and one in each tahsil. The predominant forms of crime are burglary and theft.

Land revenue administration.

The only peculiarity as regards tenure of land is that in a few villages superior and inferior proprietors are found: the settlement is (with one exception) made with the latter, the superior proprietors merely receiving a charge of 5 to 10 per cent, on the revenue. The nature of the early revenue to have been very summary. They assessments appears were made, as far as possible, on the basis of existing arrangements, and were for short terms only. The administration, from annexation to 1841, was harsh and unsympathetic. The Sonepat and Delhi tahsils were regularly settled in 1842 and 1844, and Ballabgarh after its confiscation in 1857. The settlement officer in 1842 reduced the demand in Sonepat, and excused himself for so doing by pointing out that the greatest difficulty had been invariably experienced in realising the Government demand; that notwithstanding strenuous and well sustained efforts the District officers and their subordinates had been baffled, and that large balances had remained uncollected frequently. Reductions were made in all tahsils by the regular settlement. The settlement of the whole District was revised between 1872 and 1880. The revenue rates on land irrigated from wells varied from Rs. 4 to 8 annas, on flooded land from Rs. 2-8 to Rs. 2, and on unirrigated land from R. 1-10 to 10 annas. Canal lands were assessed at dry rates of about R. 1-8, Rs. 3 being paid as occupier's rate for the use of the water, plus an extra R. 1-8 as owner's rate. on the Najafgarh jhil were charged a fluctuating assessment on the area cultivated, varying from Rs. 6 to R. 1-8 according to the nature of the crop. The new assessment resulted in an increase of Rs. 45,000. A change was made in 1895 in the method of realizing canal revenue, and the system then adopted remains in force. The land revenue demand in 1903-04 was, including cesses, 10 lakhs. The average size of a proprietary holding is 3 acres.

The total collections of revenue and those of land revenue DELHI are shown below, in thousands of rupees :-

	1880-81.	1890-91.	1900 01.	1903-4.
Land Revenue	7,95,	7,82,	7,68,	8,06,
Total Revenue	11,57,	11,71,	15,10,	16.2-,

The District contains 4 municipalities, DELHI, SONEPAT, Local and BALLABGARH and FARIDABAD, and 2 notified areas, Mahrauli municipal. and Naiafgarh. Outside these areas local affairs are managed by the District board, whose income amounted to a lakh in 1003-04. The expenditure in the same year was a lakh, of which education took a fifth.

The regular police force consists of 1,023 of all ranks, of Police and whom 539 are municipal police and is under a Superintendent who usually has one Assistant and one Deputy Superintendent (in charge of the city) and 6 Ins ectors under him. Village watchmen number 924. There are 14 police stations, of which 3 are in Delhi, 8 outposts, and 10 readposts. The District jail at head-quarters has accommodation for 536 prisoners.

The District stands 5th among the 28 Districts of the Education. Frovince in respect of the literacy of its population. In 1901 the proportion of literate persons was 46 per cent. (8 males and 6 females). The number of pupils under instruction was 5,210 in 1880-81, 8,124 in 1890-91, 9,525 in 1900-01, and 10,644 in 1903-4. In the latter year the District had 2 arts colleges, 14 secondary schools, 110 primary, 1 training, and 3 special schools, and 12 advanced and 123 elementary, there being 570 female scholars in the public, and 277 in the private schools. The principal educational institutions are in DELHI city. The total expenditure on education in 1903-04 was 2 lakhs, of which Rs. 19,000 came from District funds, Rs. 18,000 from municipalities and Rs. 73,000 from Provincial

The public medical institutions are the municipal Dufferin Hospitals and Hospital and two dispensaries in Delhi, and 6 outlying dispen- dispensaries. saries. In 1904 these treated a total of 131,050 out patients

DELHI DISTRICT. and 2,299 in-patients, and 5,975 operations were performed. The expenditure in 1904 was Rs. 30,000, the bulk of which was met from municipal and District funds. Besides the institutions mentioned above, Delhi city possesses the St. Stephen's Hospital (Cambridge Mission) for women and the Baptist dispensary. The Victoria Memorial Zanāna Hospital, erected at a cost of one lakh, was opened in December 1906.

Waccination.

The number of successful vaccinations in 1903 4 was 27,280, representing 397 per thousand of the population. Vaccination is compulsory in Delhi and Sonepat towns.

(D. C. J. Ibbetson, District Gazetteer, 1883-84; R. Maconachie, Settlement Report, 1882.)

Delhi Tahsil.—The central tahsil of the Delhi District, Punjab, lying between 28° 30' and 28° 53' N. and 76° 51' and 77° 17' E., with an area of 429 square miles, to the west of the river Jumna. Its population was 359,008 in 1901, compared with 329,547 in 1891. The head-quarters are at the city of Delhi, population 208,575, and it also contains 243 villages. The land revenue and cesses amounted in 1903-04 to 3'4 lakhs. The eastern portion of the tahsil lies in the Jumna lowlands. From the city southwards stretches a line of low quartzite hills, while the south-west corner is occupied by the Najafgarh swamp. The rest of the tahsil consists of a fertile upland plain, poorly wooded and with a light rainfall, but for the most part irrigated by the Western Jumna Canal.

Sonepat Tahsil (Sonpat).—The northern tahsil of the Delhi District, Punjab, lying between 28° 49' and 29° 14' N. and 76° 48' and 77° 13' E. It has an area of 460 square miles, and lies to the west of the river Jumna which separates it from the Meerut and Bulandshahr Districts of the United Provinces. Its population was 203,338 in 1901, compared with 189,490 in 1891. It contains the town of SONEPAT (population 12,990), the tahsil head-quarters, and 224 villages, and the land revenue and cesses amounted in 1903-4 to 4'1 lakhs. The eastern portion of the tahsil lies in the Jumna lowlands. The upland plateau to the west is irrigated by the Western Jumna Canal.

Ballabgarh Tahsil.—The southern tahsil of the Delhi District, Punjab, lying between 28° 12' and 28° 36' N. and 77° 7' and 77° 31' E., with an area of 395 square miles to the west of the river Jumna which separates it from the Bulandshahr District of the United Provinces. Its population was 126,693 in 1901, compared with 119,652 in 1891. It contains

the towns of BALLABGARH (population 4,506), its head-quarters, and FARIDABAD (5.310) and 247 villages. The land revenue and cesses in 1903-04 amounted to 2.7 lakhs. The country is in general bare and treeless. On the east lie the Jumna lowlands, while the hills that run south from the Delhi Ridge cross the western portion of the tahsil. The rest of the tahsil consists of a plain of sandy loam.

Ballabgarh Town,—Head-quarters of the Ballabgarh tahsil, Delhi District, Punjab, situated in 28° 20' N. and 77° 20' E, 24 miles south of Delhi on the Delhi-Muttra road and the Delhi-Agra branch of the Great Indian Peninsula Railway. Population (1901) 4,506. The name Ballabgarh is a corruption of Balramgarh, 'the fort of Balram,' a Jat chief who held the surrounding country under Suraj Mal of Bharatpur, and built its fort and palace. In 1775 the estate was transferred by the Delhi emperor to Ajit Singh, whose son Bahadur Singh was recognised in 1803 asshief and built the town. His successor was hanged for complicity in the Mutiny of 1857 and the estate confiscated. The municipality was created in 1867. The average income for the 10 years ending 1902-03 was Rs. 7,000 and the expenditure Rs. 6,300. Its income and expenditure for 1,03-04 were Rs. 8,700, chiefly derived from octroi, and Rs. 6,900 respectively. The town possesses a vernacular middle school. and a Government dispensary.

Delhi City (Dehli or Dilli):-Head-quarters of the Delhi Division, District and tahsil, Punjab, and former capital of the Mughal empire, situated in 28° 39' N. and 77° 15' E., on the west bank of the Jumna, distant from Calcutta 956 miles, from Bombay 982 miles, and from Karāchi 907 The population at the last three enumerations was: 1881, 173,393; 1891, 192,579; and 1901, 208,575; the increase in the last decade is greatly due to the development of mill industries. The population in 1901 included 114,417 Hindus, 88,460 Muhammadans, 3,266 Jains, 2,164 Christians and 229 Sikhs.

The area close to where the northernmost spur of the History Aravalli hills abuts on the Jumna has from the remote times been the site of one great city after another. First of these is the city of Indraprastha, founded, according to the tradition preserved in the Mahabharata, by the Pandava chief Yudhishthira. Indraprastha was, however, only one of the five prasthas or 'plains' which included Sonepat, Panipat, Pilpat and Baghpat. Firishta has preserved a tradition that Dehli or Dilli was founded by a Raja Dhilu before the Macedonian invasion, but as a historical city Delhi only

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dates from the middle of the 11th century A. D. when Anang Pal, a Raiput chief of the Tomar clan, built the Red Fort, in which the Kuth Minar now stands, and founded a town. He also removed the famous iron pillar on which are inscribed the eulogies of Chandra gupta Vikramāditva, probably from Muttra, and set it up in 1052 as an adjunct to a group of This remarkable relic consists of a solid shaft of metal 16 inches in diameter and about 23 feet in height, set in masonry, 3 feet of it being below the surface. Tradition indeed asserts that a holy Brahman assured the Raja that the pillar had been driven so deeply into the earth that it reached the head of Vasuki, the serpent king who supports the world. and, consequently, had become immoveable, whereby the dominion was as ensured for ever to the dynasty of its founder, so long as the pillar stood. The incredulous Raja ordered the monument to be dug up, when its base was found reddened with the blood of the serpent king. Thus convinced, Anang Pal at once commanded that the shaft should be sunk again in the earth; but as a punishment for his want of faith, it appeared that no force could restore it to its place as before. Hence the city derived its name Dhill from the fact that the column remained loose (dhila) in the ground. Unfortunately for the legend, not only does the inscription prove its falsity, but the name of Dilli is undoubtedly earlier than the rise of the Tomar dynasty.

Anang Pal, who seems to have come from Kanaui ruled a petty principality, extending to Hansi on the north the Ganges on the east and Agra on the south. His dynasty lasted just a century, until 1151 when it was supplanted by Visaldev or Bisaldeo, a Chauhan chief of Ajmer, Bisaldeo's grandson, the famous Prithwi Raj or Rai Pithora, ruled both Delhi and Aimer, and built the city which bears his name at the former place. The walls of this city may still be traced for a long distance round the Kuth Minar. From Celhi Rai Pithora in 1191 led his Hindu vassals and allies to defeat Muhammad of Ghor at TIRAWARI, but in the following year he met with a decisive overthrow at that place. With his death the history of Hindu Delhi ends. In 1193 Kutb-ud-din, Muhammad's slave general, took Delhi and on his master's death in 1206 it became the capital of the Slave Dynasty to whom old Delhi owes its grandest ruins. Kutb-ud-din's mosque was commenced, according to the inscription on its entrance archway, immediately after the capture of the city in 1193. It was completed in three years, and enlarged during the reign of Altamsh, son-in-law of the founder, and the greatest monarch of the line. This mosque consists of an outer and inner courtyard, the latter surrounded by an ex-

Tuisite colonnade, whose richly decorated shafts have been torn DELHI from the precincts of earlier Hindu temples. Originally a DISTRICT. thick coat of plaster concealed from the believer's eyes the profuse idolatrous ornamentations; but the stucco has now fallen away, revealing the delicate workmanship of the Hindu artists in all its pristine beauty. Eleven magnificent arches close its western façade, Muhammadan in outline and design. but carried out in detail by Hindu workmen, as the intricate lace-work which covers every portion of the arcade sufficiently Ibn Batūta, the Moorish traveller, who was hears witness a magistrate in Delhi, and saw the mosque about 150 years after its erection, describes it as unequalled either for beauty or extent. The Kuth Minar, another celebrated monument of the great Slave king, stands in the south-east corner of the outer courtyard of the mosque. It rises to a height of 238 feet, tapering gracefully from a diameter of 47 feet at the base to nearly of feet at the summit. The shaft consists of five storeys. enclosing a spiral staircase, and was crowned by a now broken cupola, which fell during an earthquake in 1803. The original purpose of the minaret was doubtless as a muazzan's tower. whence the call to morning and evening prayer might be heard throughout the whole city The site chosen for the mosque was that already occupied by the iron pillar, which forms the central ornament of the inner courtyard. Around in every direction spreads a heap of splendid ruins, the most important of which are the tomb of Altamsh and the unfinished minaret of Ala-uddin, commenced in 1311.

During the reign of the Slave kings, a queen, for the only time in its history sat on the throne of the Muhammadan empire of Delhi. As the patriot Hungarians, in the annals of modern Europe, drew their swords for Rex Maria Theresa, so her subjects gave to queen Raziva the masculine title of Sultan.

The Slave dynasty retained the sovereignty till 1290, when Jalal-ud-din, the Khilil, founded a new line. During the reign of his nephe w and successor, Ala-ud-din, Delhi was twice unsucces sfully attacked by Mongol hordes, who swept into the country from Central Asia.

In 1321 the house of Tughlak succeeded to the empire; and Ghiyas-ud-dīn, its founder, erected a new capital, Tughlakābād, on a rocky eminence 4 miles further to the east. Remains of a massive citadel, and deserted streets or lanes, still mark the spot on which this third metropolis arese; but no human inhabitants now frequent the vast and desolate ruins. Ghiyas-uddin died in 1325, and was succeeded by his son Muhammad bin Tughlak, who thrice attempted to remove the scat of governDELHI -DISTRICT. ment and the whole population from Delhi to Daulatābād in the Deccan, more than 800 miles away. Ibn Batūta gives a graphic picture of the desolate city, with its magnificent architectural works, and its bare, unpeopled houses. Fīroz Shāh Tughlak once more removed the site of Delhi to a new town, Fīrozābād, which appears to have occupied all the ground between the tomb of Humāyūn and the Ridge. Amid the ruins of this prince's palace, just outside the modern south gate, stands one of the famous pillars originally erected by Asoka, in the 3rd century B. C. This monolith, 42 feet in height, is known as Fīroz Shāh's Lāt or pillar as it was brought by him from Topra near Khizrābād in the District of Ambāla. It is composed of pale pink sandstone, and bears a l'ālī inscription, first deciphered by Mr. Prinsep.

In December 1398, while rival claimants of the house of Tughlak fought for the remnants of the kingdom, the hordes of Timur reached Delhi. Mahmud Shah II, the nominal king, fled to Gujarāt, after his army had suffered a defeat beneath the walls, and Timur, entering the city, gave it over for five days. to plunder and massacre. Dead bodies choked the streets; and when at last even the Mongol appetite for carnage was satiated, the host retired, dragging with them into slavery large numbers both of men and women. For two months Delhi remained absolutely without government; until Mahmud Shah recovered a miserable fragment of his former empire. In 1412 he died; and his successors the Saiyid vassals of the Mongols, held Delhi, with a petty principality in the neighbourhood, until 1450, when the Lodi dynasty succeeded to the Muhammadan empire. In 1503 Sikandar II made Agra the capital of the empire, but Delhi retained much of its former importance. After his defeat of Ibrahim II, the last of the Lodis, at Pasipat, Babar entered Delhi in 1526, but resided mainly at Agra. Humayun removed to Delhi, and built or restored the fort of Purana Kila on the site of Indraprastha. The Afghan Sher Shah, who drove out Humayun in 1540, enclosed and fortified the city with a new wall. One of his approaches, known as the Lal Darwaza or Red Gate, still stands isolated on the roadside, facing the modern jail. The fortress of Salimgarh preserves, the name of a son of Sher Shah. Humayun's tomb forms one of the most striking architectural monuments in the neighbourhood. Akbar and Jahangir usually resided at Agra, Lahore, or Ajmer. Shah Jahan rebuilt the city on its present site, surrounding it with the existing fortifications and adding the title of Shahjahanabad from his own name. He also built the Jama Masjid, and reopened the Western Jumna Canal, From his time, except for brief periods, Delhi remained the head- DELNI quarters of the Mughal emperors. In 1737, during the reign Distrator. of Muhammad Shah, Baji Rao the Maratha appeared beneath the walls of Delhi. Two years later, Nadir Shah entered the city in triumph and re-enacted the massacre of Timur. For 58 days the victorious Persian plundered rich and poor alike, and left the city with a booty estimated at £9,000,000. Refore the final disruption of the decaying empire in 1760. the unhappy capital was twice devastated by civil war. sacked by Ahmad Shāh Durrāni, and finally spoiled by the rapacious Marāthās. Alamgīr II, the last real emperor, was murdered in 1759. Shah Alam, who assumed the empty title. could not establish his authority in Delhi, which became the alternate prey of Afghan and Marathas until 1771, when the latter party restored the emperor to the city of his ancestors. In 1788, a Marāthā garrison permanently occupied the palace. and the king remained a prisoner in the hands of Sindhia until the British conquest. On March 14th, 1803, Lord Lake, having defeated the Marathas, entered Delhi, and took the king under his protection. Next year, Holkar attacked the city; but Colonel, afterwards Sir David Ochterlony, first British Resident, successfully held out against overwhelming numbers for 8 days, until relieved by Lord Lake. The conquered territory was administered by the British in the name of the emperor, while the palace remained under his jurisdiction.

The story of the Mutiny at Delhi and of the restoration of British sovereignty belong rather to Imperial than local history. Delhi was recovered in September 1857, and remained for a while under military government; and it became necessary, owing to the frequent murders of European soldiers, to expel the population for a while from the city. Shortly after, the Hindu inhabitants were freely readmitted; but the Muhammadans were still rigorously excluded, till the restoration of the city to the civil authorities, on January the 11th, 1858.

Delhi has on two occasions since the Mutiny been the scene of Imperial Assemblages, in 1877, when Queen Victoria was proclaimed Empress of India, and in 1903 to celebrate the accession of Edward VII.

The modern city of Delhi extends for over two miles Medern along the west bank of the river Jumna, and on the other Delhi. three sides is enclosed by a stone lofty wall 31 miles in length built by Shah Jahan, and reconstructed by the British at the beginning of the last century. It was once entered by 14 gates, 8 on the land side and 6 leading to the river; but many of these have now been removed. Of those that remain, the principal are—on the north the Kashmir gate, on the west

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the Farāsh Khāna and Ajmer gates, and on the south the Delhi gate. The imperial palace, now known as the fort, lies to the east of the city, and abuts directly on the river. It is surrounded on three sides by an imposing wall of red sandstone, with small round towers, and gateways on the west and south.

On the north-east of the fort is the out-work of Salimgarh. At this point the East Indian Railway enters the city by a magnificent bridge across the Jumna passing over Salimgarh and through a corner of the fort to the railway station within the city walls. North-west of the fort, up to the Kashmir gate, lies an open space in which are situated the public offices and St. James' Church. South of this and separated from it by the railway line lies another open space devoted to the public gardens, and in the south-east corner of the city, in the quarter known as Daryā Ganj, is the cantonment. The area thus occupied covers nearly one-half of the entire city; it presents a comparatively open appearance, and forms a marked contrast to the south-west quarter of the city which is densely occupied by the shops and dwellings of the native population.

The architectural glories of Delhi are famous alike in Indian and European literature. It is impossible in a brief notice like the present to attempt any adequate description of them. They are described in Mr. Fergusson's History of Indian and Eastern Archivectu e (1876), in Mr. Fanshawe's Delhi Past and tresent (1902), and in many other works. The palace of Shah Jahan, perhaps less picturesque and more sober in tone than'that of Agra, has the advantage of being built on a more uniform plan, and by the most magnificent of the royal builders of India. It forms a parallelogram, measuring 1,600 feet east and west by 3,202 feet north and south, exclusive of the gateways. Passing the deeplyrecessed portal, a vaulted hall is entered, rising two storeys, 375 feet long, like the nave of a gigantic Gothic cathedral-' the noblest entrance,' says Mr. Fergusson, 'to any existing palace.' Facing this entrance is the Naubat Khana or music hall beyond which is the great court of the palace in the middle of which stands the Dīwān-i-ām or hall of public audience. Behind this again is a court containing the Rang Mahal or painted chamber. North of this central range of buildings stands the Diwan-i-khās or private audience hall which forms, 'if not the most beautiful, certainly the most ornamented of all Shah Jahan's buildings.' It overhangs the river, and nothing can exceed the delicacy of its inlaid work or the poetry of its design. It is on the walls of this hall that the famous inscription runs, "If there is a heaven on earth, it is this—it is this!" South of the central range of buildings an area, measuring about 1,000 feet each way. was occupied by the harem and private apartments of the

palace, covering, consequently, more than twice the area of Delhi the Escurial, or, in fact, of any palace in Europe.

The buildings in the native town are chiefly of brick, wellbuilt and substantial. The smaller streets are narrow and tortuous, and in many cases end in culs-de-sac. On the other hand, no city in India has finer streets than the main thoroughfares of Delhi, 10 in number, thoroughly drained, metalled, and lighted. The principal thoroughfare, the Chandni Chauk. or silver street, leads eastwards from the fort to the Lahore gate, three-quarters of a mile long by 74 feet broad. Throughout the greater part of its length, a double row of trees runs down its centre on both sides of a raised path, which has taken the place of the masonry aqueduct that in former days conducted water from the canal into the palace. A little to the south of the Chandni Chauk is the Jama Masjid, or great mosque, standing out boldly from a small rocky rising ground. Begun by Shah Jahan in the fourth year of his reign, and completed in the tenth, it still remains one of the finest buildings of its kind in India. The front courtyard, 450 feet square, surrounded by a cloister open on both sides, is paved with granite inlaid with marble, and commands a view of the whole city. The mosque itself, a splendid structure forming an oblong 261 feet in length, is approached by a magnificent flight of stone steps. Three domes of white marble rise from its roof, with two tall and graceful minarets at the corners in front. The interior of the mosque is paved throughout with white marble, and the walls and roof are lined with the same material. Two other mosques deserve a passing notice, the Kali Masjid or black mosque, so called from the dark colour given to it by time, and supposed to have been built by one of the early Afghan sovereigns, and the mosque of Roshan-ud-daula. Among the more modern buildings may be mentioned the Residency, now occupied by the Government High School, the town hall, a handsome building in the Chandni Chauk containing a Darbar hall with a good collection of pictures, a museum and public library, and the Church of St. James built at a cost of £ 10,000 by Colonel Skinner, an officer well known in the history of the East India Company. About half way down the Chandni Chauk is a high clock-tower. North of the Chandni Chauk lie the Queen's gardens. Outside the city walls the civil lines stretch away on the north as far as the historic ridge, about a mile outside the town. To the west and south-west considerable suburbs cluster beyond the walls, containing the tombs of the imperial family. That of Humayan is a noble building of red sandstone with a dome of marble. It lies about 31 miles from the Delhi gate in a large garden of terraces, the whole surrounded by an embattled wall,

DELNI DISTRICT. with towers and four gateways. In the centre stands a platform about 20 feet high by 200 feet square, supported by cloisters, and ascended by four great flights of granite steps. Above rises the mausoleum, also a square, with a great dome of white marble in the centre. About a mile to the westward is another burying-ground, or collection of tombs and small mosques, some of them very beautiful. The most remarkable is perhaps the little chapel in honour of a celebrated Muhammadan saint, Nizām-ud-dīn, near whose shrine the members of the Mughal imperial family, up to the time of the Mutiny, lie buried, each in his own little enclosure, surrounded by very elegant latticework of white marble.

The palaces of the nobles, which formerly gave an air of grandeur to the city, have for the most part disappeared. Their sites are occupied by structures of less pretension, but still with some elegance of architectural design. The city is now amply supplied with water; and much attention has of late been paid to cleanliness and sanitary requirements generally.

The municipality was created in 1850. The average income and expenditure for the 10 years ending 1902.03 were 5.6 lakhs. Its income for 1903-04 was 6.5 lakhs, chie fly derived from octroi 3.1 lakhs, taxes on houses, lands, animals, and vehicles and tolls 1 lakh, municipal property and fines, &c., Rs. 79,000 and sale of water Rs. 40,000; and its expenditure 5.8 lakhs, including general administration Rs. 77,000, public safety Rs. 96,000, water-supply Rs. 40,000, conservancy Rs. 83,000, hospitals and dispensaries Rs. 41,000, public works Rs. 69,000 and education Rs. 33,000.

The ordinary troops include a battery of garrison artillery and a detachment of Br. tish infantry in the fort, a native infantry regiment in Darya Ganj, and a native cavalry regiment, for which lines have recently been built in the old cantonment, beyond the Ridge. The income and expenditure of cantonment funds averaged Rs 12,200 in the 10 years ending 1902-03.

Arts and manufactures. The occupations and industries of Delhi are numerous and comprise jewelry, silversmith's work, brass and copper ware, ivory carving, pottery, weaving, gold and silver embroidery, miniature painting, etc. For centuries the jewelry of Delhi has had a worldwide reputation, but it is doubtful whether the productions of the present day are equal to those of Mughal times. Ivory carving is carried on very successfully by one or two families, and within recent years some very beautiful caskets and similar articles in this material have been produced. A feature of the work is the employment of geometric open work patterns which are carried out with a very high degree of finish. The pottery is a kind of rough porcelain and has certain artistic qualities. It is a comparatively modern art, and is in the hands of only one or two craftsmen. An important,

industry is gold and silver embroidery, chiefly carried on by the Dalus dealers of the Chandni Chauk. Although the designs are now showing signs of European influence, good oriental patterns are still obtainable, and the art is in a fairly flourishing condition. The manufacture of gold and silver wire to carry on this industry is an extensive one and employs a large number of hands. These kandla kashan or wire drawers pay the municipality yearly Rs 25,000, in return for which it supervises the melting and blending of the metal in a central workshop, and thereby gives it a guarantee of purity whose value is undisputed throughout India. Modern mill and factory industries have made great progress in the city. The Delhi Cloth and General Mills in 1904 employed 624 hands, the Hanuman and Mahadeo Spinning and Weaving Mills 895, the Kishen Cotton Spinning Mill 575 and the Jumna Cotton Spinning Mills 388. The principal flour mills are the Northern India Flour Mills with 107 employés, the Ganesh Flour Mills with 178 and John's Flour Mill with The three sugar-cane press factories employed 246 hands, and the three cotton-ginning factories 305. Minor industries include printing, biscuit-making, malting, and iron and brass work. The total number of factories, mills, &c., in 1904 was 23 and the number of employés 3,364.

Delhi possesses a very considerable trade, though the continuation of the North-Western Railway on the eastern bank of the river has thrown it somewhat off the modern line of traffic. Is derives importance as a trade centre at present owing to the fact that grain and piece-goods are free of octroi, and it still forms the main entrepôt for commerce between Calcutta or Bombay on the one side and Rajputana on the other. The chief imports include chemicals, cotton, silk, fibres, grain, oilseeds, ghi, metals, salt, horns, hides, and European piece-goods. The exports consist of the same articles in transit together with tobacco, sugar, oil, jewellery, and gold or silver lacework. Beyond the borders of the Province, Delhi merchants correspond with those of Jind, Kābul, Alwar, Bikaner, Jaipur and the Doab; while with all the Punjab towns they have extensive dealings. European finance is represented by the Bengal, National, Delhi and London, Allahabad and Upper India Banks, and several cotton merchants have agents in the city. The great trade avenue of the Chandni Chauk, already described, is lined with the shops and warehouses of merchants, and is one of the chief sights of interest to the visitor at Delhi.

The principal educational institution was, until 1877, the Educational. Delhi College, founded in 1792, but abolished in 1877, in

DELHI DISTRICT. order () concentrate higher education in the Punjab University at Lahore. The chief school is now the municipal high school with 6 branch schools; other high schools are the Anglo-Arabic, the Anglo-Sanskrit, St. Stephen's mission school, and the Shāhzāda high school, maintained chiefly for poor descendants of the Mughal royal family. All these receive grants-in-aid. The municipal high school has been managed by the Education department since 1904. The city also has a normal school, which trains vernacular teachers for primary schools, a municipal industrial school, the aided middle boarding schools for girls of the Baptist and Society for the Propagation of the Gospel Missions, and a school on the Yūnāni system of native medicine.

Farīdābād.—Town in the Ballabgarh tahsīl of the Delhi District, Punjab, situated in 28° 25' N. and 77° 20' E., 16 miles from Delhi, near the Delhi-Muttra road and on the Delhi-Agra branch of the Great Indian Peninsula Railway. Population (1901) 5,310. The town was founded in 1607 by Shaikh Farīd, Jahān-gīr's treasurer, to protect the high-road from Delhi to Agra. It is of no commercial importance. The municipality was created in 1867. The average income for the 10 years ending 1902-03 was Rs. 5,900 and the expenditure Rs. 5,800. Its income for 1903-04 was Rs. 6,800, chiefly derived from octroi, and expenditure Rs. 6,400. The chief educational institutions are the Victoria anglo-vernacular middle school (unaided), a vernacular middle school maintained by the municipality, and the English station school (middle). There is a Government dispensary.

Indarpat.-Village in Delhi District, Punjab, occupying the site of the ancient Indraprastha, and situated in 28° 36' N. and 77° 17' E., close to the modern city of DELHI. The original town stood upon the banks of the Jumna, between the Kotila of Firoz Shah and the tomb of Humayūn; and although the river has now shifted its channel a mile eastward, the former bed may still be traced past the early site. Scarcely a stone of the ancient capital remains standing; but the village of Indarpat and the Muhammadan fort of Purana Kila probably occupy the true site, while the modern name is obviously a corruption of the old Hindu title. Indraprastha is commonly believed to have been founded by the earliest Aryan colonists of India, and the Mahabharata relates how the five Pandavas. Yudhishthira and his brethren, leading a body of settlers from Hastinapur on the Ganges, expelled the savage Nagas, and built their capital upon this spot. For later details, see DELHI CITY.

Sonepat Town (Sonpat; Sanskrit Suvarnaprastha).— Head-quarters of the Sonepat tahsil, Delhi District, Punjab,

situated in 29° N. and 77° 1' E., on the Delbi-Ambala-Kalka Ducht Railway, 28 miles north of Delhi. Population (1901) 12,990. One popular tradition avers that this is one of the five towns mentioned in the Mahabharata which Yudhishthira demanded from Duryodhana as the price of peace. Another ascribes its foundation to Raja Soni, 13th in descent from Arjuna, a brother of Yudhishthira. It is of no commercial importance. The municipality was created in 1867. The average income and expenditure for the 10 years ending 1902-03 were Rs. 14,300. Its income for 1903-04 was Rs. 16,000, chiefly derived from octroi, and expenditure Rs. 16,400. The town possesses an anglo-vernacular middle school, a Government dispensary, and a cotton-ginning and pressing factory which in 1904 employed 130 hands.

Karnal District .- A District in the Delhi Division, KARNAL Punjab, lying between 29° 11' and 30° 15' N. and 76° 11' and DISTRICT. 77° 17' E., with an area of 3,153 square miles, and including Boundaries 36 outlying villages, scattered throughout the eastern part of configuration, the Patiala State. The District is bounded on the north by and hill and Patiāla State and Ambāla District; on the east by the river Jumna which separates it from the Districts of Saharanpur, Muzaffarnagar, and Meerut in the United Provinces; on the south by the Punjab Districts of Delhi and Rohtak; and on the west by the States of Patiala and Jind. It is divided into two parts by the low ridge which forms the watershed between the Indian Ocean and the Bay of Bengal. To the east of this ridge along the Jumna lies the khādar, a strip of low-lying land from 5 to 10 miles wide; though it is not so thickly wooded as the rest of the District, date-palms abound, and in places a thick jungle skirts the river bank. West of the ridge lies the bangar, an upland plain watered throughout by the Western Jumna Canal, and stretching parallel to the khadar the whole length of the District. These two tracts fill up practically the whole of its southern tahsil of Panipat, but in Karnal and Kaithal, the central tahsils, the bangar rises with a perceptible step into the Nardak,* a high and once arid country, now traversed by the Sirsa branch of the Western Jumna Canal. In the north of the District nearly the whole of Thanesar and the northern part of Kaithal tahsils are intersected by mountain torrents, which drain the lower Himalayas, and include large tracts of wild country covered with forests of dhak (Butea frondosa).

^{*} The Nardak is properly another name for KURUKSHERRA but it extended to include all the high tract.

KARNAL DISTRICT. The Jumna forms the entire eastern boundary for a distance of 81 miles. Its bed varies from half a mile to a mile in width, of which the stream occupies only a few hundred yards in the cold weather. The most important of the torrents which traverse the northern portion are the GHAGGAR, with its tributaries the Umla and SARASWATI, the CHAUTANG, and the Mārkanda and Purān, the last an old bed of the Ghaggar. Minor drainage channels are the Nai or 'new' Nadi, the Būrhi or 'old' Nadi, and Rākshi.

Geology and botany.

The District offers nothing of geological interest, as it is situated entirely on the alluvium. The flora of the upper Gangetic plain is well represented in the eastern portion; in the west there is an approach to the desert vegetation; while the Jumna valley produces a few temperate types, e.g., a rose, a kind of scurvy grass (Cochlearia), both of which are found again in Lower Bengal, and a crowfoot (Ranunculus pensylvanicus), which extends to Ludhiāna, but is absent from the Himālaya. Relics of a former Deccan flora, of which a wild cotton is the most interesting, survive, especially in the Thānesar neighbourhood. Indigenous trees except the dhāk are uncommon; in the Jumna khādar a low palm abounds which is often taken for a wild form of the date-palm, but is almost certainly a distinct species.

Fauna.

The Nardak was a favourite hunting ground of the Mughal emperors, and as late as 1827 Archer says that lions were sometimes seen within 20 miles of Karnāl, while tigers were exceedingly common. Now, however, even the leopard is only rarely found, but wolves are still common. Antelope, nīlgai, ravine-deer and hog-deer are fairly plentiful where there is suitable cover. Small game is abundant.

Climate and temperature,

Fever is particularly prevalent in the Naili (Nāli) tract, flooded by the Saraswati, and in the canal-irrigated portions of the District. Owing to the faulty alignment of the canal and the swamping caused thereby fever used to be terribly prevalent, and in consequence the cantonments were removed from Karnāl, but recent improvements have greatly diminished the evil. The climate of Kaithal resembles that of the plains of the Punjab proper but the Jumna tahsīls are not subject to the same extremes of heat and cold.

Rainfall.

The average yearly rainfall is 30 inches at Karnāl, 23 at Pānipat and 18 at Kaithal, rapidly decreasing as one goes west or south. The *khādar* receives the most plentiful and frequent rain, as many local showers follow the bed of the river. Of the rainfall at Karnāl 27'4 inches fall in the summer months and 24 in the winter.

The early legendary history of the District will be found KARNAL in the account of KURUKSHETRA or the holy plain of the Hindus, which occupies its north-western portion. The number of Indo- History and Scythian coins found at Polar on the Saraswati would seem archeology. to show that about the beginning of the Christian era the District was included in the Indo-Scythian empire. In or about 400 A.D. it was traversed by the Chinese pilgrim Fa' Hian and in 639 by Hiuen Tsiang, the latter finding a flourishing kingdom with its head-quarters at THANESAR. Though Thanesar was sacked by Mahmud of Ghazni in 1014, the country remained under Hindu rule until the defeat of Prithwi Raj at TIRAWARI in 1192. Thereafter it remained more or less firmly attached to Delhi till after the invasion of Timūr, who marched through it on his way to the capital. It then belonged, first to the ruler of Sāmāna, and then to the Lodi rulers of the Punjab, and during the century and a half that separated Akbar from Timur was the scene of numerous battles, of which the most important were two battles at PANIPAT. For two centuries Karnal enjoyed peace under the Mughals, broken only by the raid of Ibrahim Husain Mirza in 1573, the flight of prince Khusru through the District in 1606 and the incursion of Banda Bairagi in 1709. this period a canal was constructed from the Jumna and the imperial road put in repair. In 1738 Nādir Shāh defeated Muhammad Shah near Karnal, and in 1761 occurred the third great battle of PANIPAT, in which the Marathas were routed by the Durrani army. A terrible period of anarchy followed during which the tract formed a sort of no man's land between the Sikh and Maratha powers, coveted by both, but protected by neither. and the prey of every free-booter that chanced to come that way. On annexation, in 18c3, the greater part of the country was held ty Sikh chiefs or by confederacies of Sikh horsemen: and the District was gradually formed out of their territories as they escheated. The most important were the petty principalities of Kaithal, Thanesar and Ladwa, of which the first two lapsed between 1832 and 1850, while Ladwa was confiscated owing to the conduct of its chief during the first Sikh war. In 1849, the District of Thanesar was formed, but in 1862 it was broken up into the Districts of Ambala and Karnal. During the Mutiny there was a good deal of disorder, but no serious outbreak occurred. Great assistance was given by the Rajas of Patiala and Jind in preserving order. Thana Pehowa was transferred from Ambala to the Kaithal tahsil of the District in 1858, and the rest of tahsil Pipli (now Thanesar) was added to it in 1897.

The chief relics of antiquity are to be found at KARNAL, PANIPAT, THANESAR and PEHOWA. At the village of Sita Mai in

KARNAL DISIRICT, the Nardak is a very ancient shrine of Sītā and several of the great sarais built along the old imperial road still remain.

The people.

The District contains 7 towns and 1.383 villages. Its population at each of the last three enumerations was: in 1881, 820,041; 1891, 861,160; 1901, 883,225. It increased by 26 per cent. between 1891 and 1901, the increase being greatest in the Pānīpat tahsīl and least in Karnāl. In Thānesar tahsīl the population decreased 9 per cent. in the 20 years, 1881—1901, owing to the unhealthiness of the tract, while that of Kaithal increased by 20 per cent. in the same period, owing to the development of canal irrigation. The District is divided into the 4 tahsīls of Karnāl, Pānīpat, Kaithal and Thānesar, the head quarters being at the places from which each is named. The chief towns are the municipalities of KARNAL (the District head-quarters), PANIPAT, KAITHAL, SHAHABAD, THANESAR and LADWA.

The following table shows the chief statistics of population in 1901:—

	Number of			square	variation between or.	s able e.	
Tahsil.	Area in square miles	Towns.	Villages.	Population.	Population per s mile.	Percentage of vari in population be 1891 and 1991.	Number of persons to read and write.
Karnāl	836	1	3 80	248,544	297*3	+ 29	6,117
Thanesar	559	3	418	173,208	309.8	- 2.4	4,361
Fānīpat	462	1	172	156 284	424.9	+ 6'2	6,377
Kaithal 🛶	1,238	2	413	265,189	205'9	+ 3.0	4,340
District Total	* 3,153	7	1,383	883,225	280.1	+ 2.6	21,195

^{*} The only figures available for the areas of tahsils are those derived from the revenue returns, and the tahsil densities have been calculated on the areas given in the revenue returns for 1900-01. The total of the tahsil areas does not agree with the District area as shown in the Census Report of 1901, in the table above and on page 77, which is the area as calculated by the Survey department. The slight difference is due to the different methods of measurement used by the Revenue and Survey departments.

Hindus number 623,597, or over 70 per cent. of the popula- KARNAL tion. Monastic communities of Bairagis own a good deal of land DISFIRCT. and exercise considerable influence in the District. Muham- The people. madans (241,412) account for 27 per cent. of the population. The Saiyids of the District belong to the Shiah organization known as the Bārā Sādāt and are descended from Saiyid Abdul Farsh Wasīti, a follower of Mahmūd of Ghazni. Sikhs number 12,294. Hindī is spoken by 96 per cent. of the population, and Punjabi in the scattered villages surrounded by Patiala territory.

The Jats are the most numerous tribe numbering 120,000, or Their castes 14 per cent, of the population. They own 151 per cent, of the and occupaland, and are mostly Hindus, only 8,000 being Sikhs and 3,000 tions. Muhammadans. Their principal clans are the Ghatwal, Deswal, Sindhu, Pawānia, Mān, Katkhar and Jaglan. The Rajputs (83,000) own 32 per cent. of the land: 67,000 are Muhammadans, known as Ranghars. Their principal clans are the Chauhan Mandhar, Ghorewaha and Tonwar. The Rors (42,000) own 17%, per cent. and are almost entirely Hindus; they seem originally to have held their lands as dependents of the Rajputs. Gujars (30,000) are mostly Hindus, though 8,000 are Muhammadans. Their reputation is no better here than in other parts of the Division. The Tagas (4,000) claim to be a Brahman race, which has abandoned the priestly profession, and taken to agriculture; half of them in this District are Muhammadans. Of Brahmans (71,000), the Bias or Gujrātī and the Dakaut are important and interesting clans. The Saiyids (6,000) trace their descent from settlers left by Mahmud, Timur and other Muhammadan invaders. Of the Shaikhs (19,000), besides the few properly so called and the large number of converts who have taken that name, there are in many villages one or two families of a menial tribe from whom the village watchmen are drawn, and who are said to be the relics of the old policy of the emperors of settling one or two Muhammadans in every village. The Malis (26,000) have of late years immigrated in considerable numbers into the District, especially the irrigable tracts of Thanesar tahsil, where they have purchased estates. Kambohs number 14,000. Of the commercial classes the chief are the Banias (52,000). Among the menial classes may be mentioned the Chamars (leather-workers, 79,000), Chuhras (scavengers, 45,000), Jhinwars (water-carriers, 44,000), Kumhars (potters, 19,000) and Tarkhans (carpenters, 20,000). About 58 per cent. of the population are supported by agriculture, 19 are industrial, 3 commercial, and 2 professional.

There is a curious division of the non-Rajput tribes into the Dehia and Haulania factions, apparently dating from a time when the Haulanias under the leadership of the Ghatwal Jats

KARNAL DISTRICT. were called in by one of the emperors to help to coerce the Mandhār Rājputs, and were opposed by the Dehia Jāts, who from jealousy of the Ghatwāl supremacy joined the Mandhārs. The leading tamilies of the District are those of the Nawāb of Kunjpura, the Mandals of Karnāl and the Bhais of Arnauli and Siddhuwāl.

Christian missions. The Society for the Propagation of the Gospel carries on mission work in Karnāl, Kaithal and Pānīpat. Its operations include zanāna teaching, girls' schools, and a hospital and dispensary for women and children. There are also Methodist Episcopal missions at Karnāl and Pānīpat, and a Presbyterian mission at Thānesar (established in 1895) and Kaithal, to which the village of Santokh Mājra has been leased for a Christian colony. In 1501 the District contained 225 native Christians.

General agricultural conditions. The soil of the khādar is light and water lies close to the surface. The Jumna floods are however not fertilising, and the best lands are those which lie beyond their reach. The eastern bāngar is almost entirely watered by the Western Jumna Canal; the soil is a fertile and easily worked loam, and the tract is for the most part a sheet of cultivation. The soil of the Kaithal bāngar is a strong intractable loam, chiefly irrigated by the new Sirsa branch of the Western Jumna Canal, which also supplies most of the Kaithal Nardak. The Thānesar tahsīl is a rich alluvial tract watered by the Mārkanda and Umla, but in the flooded tracts crops are very precarious owing to the uncertainty of the floods: on the Saraswati two-thirds of the crops belong to the spring harvest, chiefly gram: on the Umla coarse rice is often the only crop.

Chief agricultural statistics and principal crops. The District is held almost entirely by small peasant proprietors, large estates covering only about 160 square miles and lands leased from Government 4,000 acres.

The area for which details are available from the revenue record of 1903-4 is 3,147 square miles, as shown below:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cuiturable waste.	
Karoāl	838	450	164	263	
Thanesar	559	335	37	151	
Facipat	461	288	192	74	
Kaithal	1,289	724	208	416	
Total	3,147	1,797	601	904	

The staple products of the spring harvest are wheat and KARNAL gram, sown in 338 and 265 square miles respectively in 1903-4. Barley only covered 19 square miles. In the autumn Chief agriharvest great millet covered 256 square miles, rice and spiked statistics and millet 97 and 94 square miles respectively. Cotton covered 66 principles square miles, maize 72 and sugarcane 30.

DISTRICT.

During the 13 years, 1892-1904, the cultivated area rose Improvefrom 1,037 square miles to more than 1,797 or by 10 per ments in agricultural prace cent., the increase being chiefly due to the extensions of tice. canal irrigation. This has been accompanied by an extended cultivation of maize, cotton and sugar, as well as of the more valuable spring crops, and the use of manure is said to be increasing. Loans for the construction of wells are fairly popular. In the 5 years, 1899-1900 to 1903-04, Rs. 57,000 were advanced under the Land Improvement Loans Act, and two lakhs for the purchase of bullocks and seed.

Cattle-raising used to play an important part in the econo- Cattle, ponies my of the Nardak before the construction of the Sirsa Canal, and sheep, and the cattle of the District are still noted for their excellence. The local breed of ponies is of no particular importance. A remount depôt, established at Karnal in 1889, was abolished in 1902, and its lands are now used as a military grass farm. The District board maintains 3 horse and 5 donkey stallions. Large flocks of goats and sheep are kept in parts, the sheep being all of the small black-tailed breed. There is a fine breed of pigs at Karnal, dating from the time of the old cantonment.

Of the total area cultivated in 1903-04, 601 square miles, or 33 Irrigation. per cent., were classed as irrigated. Of this area 230 square miles were irrigated by wells, 364 square miles by canals, 32 acres by wells and canals, and 4,581 acres by streams and tanks. The District possessed 10,931 masonry wells, besides 223 unbricked wells, lever wells and water-lifts. In the khādar, although little irrigation is necessary, wells worked by Persian wheels are numerous. The new main line of the WESTERN JUMNA CANAL enters the Thanesar tahsil, and within this District gives off the Sirsa, Hansi and new Delhi branches, which irrigate the greater portion of the Nardak and bangar, except in Thanesar, where the percolation from the main line and the stoppage of the natural drainage keep the land so moist that it suffers from excess of water rather than from drought. The area irrigated from the Western Jumna Canal is 2,493 acres. The bangar in Kaithal tahsil is also supplied by the Saraswati canal (an inundation canal made and worked by the District

KARNAL DISTRICT. board), and some of the Nardak villages are also watered by floods from the Chautang. The few wells in these tracts are on the rope-The northern part of the District is and-bucket system. irrigated by floods from the hill torrents, and for the most part suffers from capricious water-supply, being water-logged one year and parched the next. Except in the more favoured tracts wells are liable to be destroyed by floods and are little used. The villages scattered through Patiala territory are irrigated from the SIRHIND Canal.

Forests.

The District contains 17 tracts of unclassed forest, with a total area of 24 square miles, in charge of the Deputy Commissioner, but these are not true forests, being covered only with scrub and small trees. About 2.6 square miles of reserved forest are under the Military Department.

Minerals.

Sal ammoniac has from ancient times been manufactured by the potters of Kaithal tahsil. About 84 tons valued at Rs. 3,400 are produced annually, and sold to merchants, who mostly export it. It is prepared by burning bricks made of the dirty clay found in certain ponds, and subjecting the substance that exudes from them to sublimation in closed The District has 4 saltpetre refineries. The only other mineral product is kankar.

Arts and

Karnal used to have a name for shoe making, but the manufactures. industry is said to be declining from want of capital, Panipat is famous for glass blowing, the chief product being silvered globes which, when broken up, are used for mirror-covered walls, or sewn on phalkaris; the glass retorts used in the manufacture of sal ammoniac are also made. The town is also noted for its manufacture of brass vessels, small fancy wares in various metals, and silver beads. The District possesses 3 cotton-ginning factories, at Pānīpat, Kaithal and Dhātrat, a cotton-press at Fanīpat, and two combined ginning and pressing factories, one at Panipat and one at Kaithal. The total number of employés in 1904 was 702. Silver work and musical instruments are made at Shāhābād. Some good lacquered wood work is also produced.

Commerce.

The chief exports are wheat, cotton, gram, fine rice, ghi brass vessels, glass, sal ammoniac and saltpetre, and the imports salt, oil and oilseeds, iron and piece-goods. Cotton and wheat go chiefly to Delhi and Ambala; ghi and hides to Delhi; oil and oilseeds come from the Punjab and the Doab; timber from Ambāla; iron and piece-goods from Delhi; and salt from Bhiwani, Delhi and Ambala. KARNAL and PANIPAT on the Delhi-Umballa-Kālka Railway are the chief marts, and a good

deal of trade goes through KAITHAL, which is on a branch of the KARNAL Southern Punjab Railway. The local trade is principally conducted through the village dealers, but a very considerable trade is carried on by the cultivators themselves and especially by Jats from Rohtak, who in the hot weather earn a good deal by plying their carts for hire.

The Delhi-Umballa-Kālka Railway runs through the District Railways and side by side with the Grand trunk road, and Kaithal is the roads. terminus of a branch of the Southern Punjab Railway. The new main line, and the Delhi and Hansi branches of the Western Jumna Canal, are navigable, as is also the Jumna in the rains. The District has 145 miles of metalled roads, and 684 of unmetalled, of which 129 miles of metalled and 67 of unmetalled roads are under the Public Works department, the rest belonging to the District board. Metalled roads connect Karnal and Kaithal, Thanesar and Ladwa, and the Grand trunk road traverses the District from north to south, but the unmetalled roads are bad, especially in the Nardak, and in the flooded tract bordering on the Saraswati and Ghagger the tracks are often impassable for weeks together during the rains.

Including the chālisa famine of 1783 the District has been Famine. visited by famine 13 times, in 120 years, one of the most terrible being perhaps that of 1833. Relief works seem first to have been established in the famines of 1861, when 22,237 persons were relieved in one month. In 1869 the famine was more severe in Karnal than in any other part of the Punjab, and hundreds of people were in a state of semi-starvation. The expenditure was 1.7 lakhs, and the highest daily average of persons relieved was 13,934. Cattle to the number of 65,000 died. From 1875 to 1877 there was not a single good crop, and though the scarcity hardly deepened into famine, the cattle suffered terribly. There was another grass famine in 1883-84. In 1896-97 the greatest daily average relieved was 12,361, and the expenditure barely 2 lakhs. The areas affected were the Nardak tracts of tahsils Karnal and Kaithal and the Naili of Kaithal. In 1899-1900 the Nardak in Karnal and part of that in Kaithal were protected by the Nardak irrigation channel constructed as a relief work in 1897; the tracts affected were chiefly the Naili and bangar tracts of Kaithal and parts of Thanesar. The greatest daily average relieved was 14,075, and the expenditure 2.6 lakhs.

The District is divided into the four tabsils of KARNAL, District sub-PANIPAT, THANESAR and KAITHAL, each under a tabsildar and divisions and naib-tahsildar. In the latest the sub-tahsil of Gula is also in staff, charge of a naib-tahsildar. The tahsil of Kaithal forms a

CARNAL DISTRICT. sub-division. The Deputy Commissioner holds executive charge of the District aided by three Assistant or Extra Assistant Commissioners, of whom one is sub-divisional officer in charge of Kaithal and one in charge of the District treasury.

aw and istice. The Deputy Commissioner as District Magistrate is responsible for the criminal justice of the District, and civil judicial work is under a District Judge. Both officers are controlled by the Divisional and Sessions Judge of the Delhi Civil Division. The District Judge has one Munsif under him who sits at head-quarters. There are also 6 honorary magistrates. Cattle-stealing, the normal crime of the District, is now less prevalent than it used to be, owing to the increase of cultivation made possible by the development of the canals. Formerly heads of families of respectable birth would demur to giving a daughter in marriage to a man who had not proved his ability to support a family by cattle-lifting.

and reenue adninistration.

The tract which passed to the British in 1803, and formed part of the old Panipat District was summarily assessed in the years 1817-24, with the exception of the estates assigned to the Mandal family in exchange for the lands they held in the United Provinces. In accordance with the spirit of the time the summary settlement was oppressive, and the methods of assessment and collection were vexatious and extortionate; a revision of assessments was necessitated by the famine of 1824, and by degrees a more reasonable system was afrived at. The regular settlement, made in 1842, both moderate and fairly distributed. In the khadar the assessment on the whole worked well; in the bangar the deterioration of soil caused by the canal brought absolute ruin to many villages; and in 1859-60 large reductions of revenue were made and principles laid down for annual relief to be afforded when necessary. Meanwhile, in the Mandal estate, the assignees struggled to realise their revenue in kind from a lawless and independent Rājput peasantry till 1847, when their oppression and mismanagement necessitated the tract being brought under settlement. The assessment was revised in 1852 and again in 1856. The revised settlement of 1872-80 comprised both these tracts; the revenue rate for irrigated land varied from R. 1-14 to Rs. 2-14, and for unirrigated land from 8 annas to R. 1-12; pasture being rated at 8 pies an acre. Canal lands were assessed at dry rates varying from R. 1-5 to R. 1-13.

The rest of the District, comprising tahsils Kaithal, Thanesar, and the Indri tract of Karnal, formed part of the territories of the cis-Sutlej chiefs, who were taken under

protection by the proclamation of 1809. These territories as they KARNAL escheated were summarily assessed. Thanesar and Indri were DISTRIGT. regularly settled in 1848-56 and Kaithal in 1853-56. The whole of this portion of the District came under the Karnal-Ambala revision in 1882-89. The average assessment on dry land is R. o-14-3 (maximum R. 1-6, minimum R. o-6-6), and that on wet land is Rs. 2-14 (maximum Rs. 3-12 and minimum Rs. 2). The total demand for 1903-04 including cesses was 12 lakhs. The average size of a holding cultivated by the owner is 5'3 acres. The whole District came under settlement in 1904, the present assessment expiring in 1908.

The total collections of revenue, and those of land revenue alone are shown below, in thousands of rupees:-

	1880-81.	1890 91.	1900-01,	1903-04.	
Land Revenue	5,88,	6,73,	8,20,	8,29,	
Total Revenue	7, ⁶ 5,	8,47,	12,68,	13,45,	

The District contains 6 municipalities, KARNAL, PANIPAT, Local and KAITHAL, SHAHABAD, THANESAR and LADWA. Outside these municipal. areas local affairs are managed by the District board, whose income amounted to nearly 11 lakhs in 1903-04. The expenditure in the same year was 1.2 lakhs, education forming the largest item.

The regular police force consists of 683 of all ranks, of whom Police and 147 are municipal police and is under a Superintendent, jails. assisted by 4 Inspectors. Village watchmen number 1,540. The District contains 22 police stations, 1 outpost, 5 road posts. The Sansis, Baloches and Tagas are proclaimed under the Criminal Tribes Act, and in 1903, 55 Sansis, 447 Baloches and 237 Tagas were registered under the Act. The District jail at head-quarters has accommodation for 155 prisoners.

Karnal is the most backward District in the Province in Education. the matter of education and in 1901 the proportion of literate persons was only 2'4 per cent. (4'3 males and 'I females), as compared with 36 in the whole Province. The number of pupils under instruction was, in 1880-81, 1,961, in 1890-91, 2,242, in 1900-01, 5,902, and in 1903-04, 5,365. In the last year the District had 9 secondary and 90 primary public schools, with 12 advanced and 62 elementary private schools, there

KARNAL DISTRICT. being 53 female scholars in the public and 72 in the private schools. The only high school is at Karnāl. The indigenous Arabic school at Pānīpat is supported by the voluntary contributions of wealthy Muhammadans, and attended by about 50 boys, chiefly from the middle class Muhammadan families of the town. The District has 3 primary schools for girls, and the ladies of the Karnāl branch of the Zanāna Mission teach women and children in the town. The total expenditure on education in 1903-04 was Rs. 47,000, the bulk of which was met from local funds, though Government contributed nearly Rs. 1,600, and fees brought in Rs. 10,000.

Hespitals and dispensaries.

Besides the Karnāl Civil hospital the District has 9 dispensaries, 1 at Karnāl and 8 at out-stations, at which, in 1904, 117,370 out-patients and 1,626 in-patients were treated, and 6,849 operations performed. The income and expenditure for 1904 amounted to Rs. 21,000, local and municipal funds contributing Rs. 11,000 and 9,000 respectively. The Society for the Propagation of the Gospel also maintains a female hospital at Karnāl.

Vaccination.

The number of successful vaccinations in 1903-04 was 20,090, amounting to 23 per thousand of population.

[A. Kensington, Customary Law of Amballa District, 1893 (for Thanesar tahsil); J. M. Douie, District Gazerteer, 1890, Settlement Report of Kurnāl-Ambála, 1891, and Riwaji-am of tahsil Kithal and pargana Indri, District Karnāl, 1892; D. C. J. Ibbetson, Settlement Report of the Pānīpat tahsil and Karnāl parganah, 1883.]

Karnāl Tahsil—The central tahsil of the Karnāl District, Punjab, lying on the west bank of the Jumna, between 29° 26′ and 30° o' N. and 76° 40′ and 77° 13′ E., with an area of 838 square miles. Its population was 248,544 in 1901, compared with 241,369 in 1891. It contains the town of KARNAL, its head-quarters, population 23,559, and 380 villages. The land revenue and cesses amounted in 1903-04 to 3·2 lakhs. On the east lie the Jumna lowlands, fertile and unhealthy, and varying in width from 5 to 10 miles. The western boundary of this tract is the old high bank of the Jumna, and from the crest of this bank the country slopes imperceptibly away into the Nardak. The upland portion of the tahsil is irrigated by the Western Jumna Canal, but in the Nardak the people have not entirely abandoned their pastoral traditions, and still retain ample grazing grounds for their cattle.

Thanesar Tahsil (Thaneswar).—The northern tahsil of the Karnal District, P unjab, lying on the west bank of the Jumna, between 29°55' and 30° 15' N. and 76° 36' and 77° 17' E., with an

area of 559 square miles. Its population was 173,208 in 1901, compared with 177,442 in 1891. It contains the towns of District. THANESAR, its head quarters, population 5,066, LADWA (3,518) and SHAHABAD (11,009) and 418 villages. The land revenue and cesses amounted in 1903-04 to 2.8 lakhs. Thanesar practically coincides with the old Pipli tahsil of the Ambala District, from which it was transferred in 1897. On the east the tahsil has a narrow frontage on the Jumna. The fertile riverain lowlands average about 6 miles in width. The western boundary of this tract is the old bank of the Jumna, and from the crest of this bank the country slop s away westwards. The uplands are intersected by several to rent beds and the soil especially to the south is for the most part stiff, and infertile. Dhak jungle abounds. The MARKANDA county on the northwest has the advantages of a lighter soil, and fertilizing floods.

Panipat Tahsil.—The southern tahsil of the Karnal District, Punjab, lying on the west bank of the Jumna, between 29° 11' and 29° 30' N. and 76° 38' and 77° 10' E., with an area of 46: square miles. Its population was 196,284 in 1901 compared with 184,856 in 1891. It contains the town of PANIPAT, its head-quarters, population 26 9'4, and 172 villages. The land revenue and cesses amounted in 1903-04 to 3 5 lakhs. On the east lie the Jumna lowlands, rich, picturesque and unhealthy. West of the railway line the country lies at a higher level. The soil is in places saline, and considerable tracts are in consequence uncultivated, but the tahsil enjoys a high degree of prosperity. The uplands are irrigated by the Western Jumna Canal.

Kaithal Tahsil.—The western tahsil and a sub-division of the Karnal District, Punjab, lying between 29° 22' and 30° 12 N. and 76° 11' and 76° 47' E., with an area of 1,289 square miles. Its population was 265,189 in 1901, compared with 257,493 in 1891. It contains the towns of KAITHAL, its head-quarters population (14,408), and PUNDRI (5,834), and 413 villages including PEHOWA, a place of considerable religious importance. The land revenue and cesses amounted in 1903-04 to 27 lakhs. The tahsil consists chiefly of the petty principality of Kaithal, which escheated in 1843. North of the Ghaggar, the country is undulating and the soil contains a considerable proportion of sand. The tract, between the Ghaggar and the southern limits of the Saraswati depression consists of vast prairies, flooded during the rains and interspersed with numerous trees and patches This tract, known as the Na li (Nali), is notori; of cultivation. ously unhealthy, but the pasture it affords is invaluable in dry years. The southern half of the tahsil is a level plain, now irrigated by the Western Jumna Canal. On the east is the

KARNAL DISTRICT. Nardak. The people have not yet entirely abandoned their pastoral traditions, and large tracts are still used for grazing alone. Further west cultivation becomes more general and in the extreme south west the soil contains a large proportion of sand.

Gula.—A sub-tahsil of the Kaithal tahsil of the Karnal District, Punjab. It has an area of 455 square miles, and contains 204 villages. Its head quarters are at the village of Gula. The land revenue and cesses amounted in 1903-04 to 1'2 lakhs.

Kunjpura (The Heron's Nest) - An estate in the Karnal tahsil and District, Punjab, founded by Najabat Khan, a Ghorgasht Pathan and soldier of fortune under the Mughal emperors. Najābat Khān built a stronghold in the marshes on the Jumna early in the 18th century, and then revolted against the imperial government. Siding with Nadir Shah in 1739, Najābat Khān was recognised by him as chief of Kunjpura and held it till he was killed in 1760, when the Marathas razed his stronghold to the ground. His son, Diler Khan, received large grants of territory from the Durranis, but he and his successor were driven out of their lands west of the Jumna by the Rajas of Jind and other Sikh chiefs In 1787, however, Sindhia expelled the Jind Rajā from Karnāl, and 10 years later general Perron recognised Gulsher as Nawab of Kunjpura. His son, Rahmat Khan, allied himself to Lord Lake in 1801, and in 1811 was recognised as an independent and protected chief by the British Government. In 1846 the Nawab of Kunjpura lost his sovereign powers, and the history of the family has since been one of incessant litigation. The present Nawab succeeded in 1886. He holds a jagir of 38 villages with a yearly revenue of Rs 31,000, besides which his estate yields an income of near'y Rs. 32,000.

Kaithal Town.—Head-quarters of the Kaithal tahsil and sub-division, Karnal District, Punjab. It lies 38 miles west of Karnal town, in 29° 48' N. and 75° 24' E., and is the terminus of the Kaithal branch of the Southern Punjab Railway. Population (1901) 14,408. Kaithal is picturesquely situated on an extensive tank, which partly surrounds it, with numerous bathing places and flights of steps. It lies in KURUKSHETRA, and is said to have been founded by the mythical hero Yudhishthira. It bore in Sanskrit the name of Kapisthala, or the 'abode of monkeys,' and possesses an asthan or temple of Anjni, mother of Hanuman, the monkey god. During the time of the earlier Muhammadan emperors it was a place of some importance, and Timur, who says its inhabitants were fire-worshippers, halted here before he attacked Delhi in 1398. The tombs of several saints the formation of the

the oldest of which is that of the Shaikh Salah-ud-din of KARNAL Balkh (1246 A. D.), show that it was a centre of Muhammadan DISTRICT. religious life. The town was renovated, and a fort built, under Akbar. In 1767 it fell into the hands of the Sikh chief, Bhai Desu Singh, whose descendants, the Bhais of Kaithal, ranked among the most powerful of the cis-Sutlei chiefs. territories lapsed to the British Government in 1843, when Kaithal became the head-quarters of a District, but in 1840 it was absorbed into the Thanesar District, which was in turn included in that of Karnal in 1862. The now somewhat dilapidated fort or palace of the Bhais stands out prominently on the bank of the tank. The municipality was created in 1867. Its average income and expenditure for the 10 years ending 1902-03 were Rs. 19,900 and 20,400 respectively. The income for 1903-04 was Rs. 15,800, chiefly derived from octroi, and expenditure Rs. 17,400. It maintains a dispensary and an anglo-vernacular middle school. Saltpetre is refined at Kaithal, and it has a considerable manufacture of lacquered wood, besides two cotton mills, one for ginning and the other for ginning and pressing. The number of employes in the mill in 1904 was 103.

Karnāl Town.—Head-quarters of the Karnāl tahsīl and District, Punjab. It lies on the old bank of the Jumna. about 7 miles from the present course of that river, in 29° 41' N. and 76° 59' E., and is on the Delhi-Umballa-Kālka Railway, distant 1,030 miles by rail from Calcutta, 1,056 from Bombay and 895 from Karāchi. Population (1901) 23,559. Its name is derived from Karna, the rival of Arjuna in the epic of the Mahabharata, by whom it is said to have been founded. It would seem to have been a place of little importance in early historical times as no mention of it occurs until towards the end of the Pathan period. Karnāl was plundered in 1573 by Ibrāhīm Husain Mirza in his revolt against Akbar, and its neighbourhood laid waste by Banda Bairagi in 1709. In 1739 it was the scene of the defeat of Muhammad Shah by Nadir Shah. After the fall of Sirhind in 1763 the town was seized by Gajpat Singh, Rājā of Jind, but in 1775 it was recovered by Najaf Khān, governor of Delhi. It again fell into the hands of Gajpat Singh, but his son Bhag Singh lost it to the Marathas in 1787, and it was subsquently made over by them to George Thomas. It then fell into the hands of Gurdit Singh of Ladwa, from whom the British took it in 1805. A cantonment was formed at Karnal, which was abandoned in 1841 owing to the unhealthiness of the station. Karnal is still unhealthy, though drainage and sanitation have done much to improve its condition. There is a fine marble tomb built by the emperor Ghiyas-ud-din to the memory of the saint Bū-A'i Kalandar. The Society for the

KARNAL DISTRICT.

Propagation of the Gospel has a mission at Karnal. The municipality was created in 1867. Its average income and expenditure for the 10 years ending 1902-03 were Rs. 32,500 and 32,100 respectively. The income for 1003-04 amounted to Rs. 33,800, mainly derived from octroi, and expenditure to Rs. 33,500. The chief manufactures are country cloth, for local consumption, and shoes. Its principal educational institution is the Karnal anglo-vernacular high school managed by the Education department. It possesses a civil hospital with a branch in the town. The Society for the Propagation of the Gospel also maintains a female hospital and dispensary.

Lādwa.—Town in the Thānesar tahsīl, Karnāl District, Punjab, situated in 29° 59' N. and 77° 3' E. Pcpulation (1901) 3,518. The town and neighbourhood belonged to a Sikh family and were confiscated in 1846 in consequence of their conduct in the first Sikh war. The place is of no commercial importance. The municipality was created in 1867. The average income and expenditure for the 10 years ending 1902-03 were Rs. 5,300. The income for 1903-04 was Rs. 4 500, chiefly derived from octroi, and expenditure Rs. 4,900. The town has a vernacular middle school and a Government dispensary.

Panipat Town.—Head-quarters of the Fanipat tabsil in the Karnal District, Punjab, situated in 29° 24' N. and 76° 59' E., on the Delhi-Umballa-Kālka Railway, 1,009 miles by rail from Calcutta, 1,035 from Bombay, and 916 from Karāchi. Population (1901) 26,914. The town is of great antiquity, and is mentioned in the Mahābhārata as one of the five places demanded by Yudhishthira from Duryodhana as the price of peace. In Muhammadan times it would appear to have been of considerably greater importance than it is now. It was from Pānīpat that prince Humāyūn plundered Delhi in 1390 and was defeated in the neighbourhood by Abū Bakr. Pānīpat was y years later held for Tatar Khan and taken by Ikbal Khan, and in the next year deserted on Timur's approach. During the reign of Bahlol Lodi his son Nizām Khān, afterwards Sikandar Lodi, seized Panipat and made it his head-quarters. But its chief title to fame lies in that it was the scene of the three most decisive battles of Northern India: the defeat of Ibrāhīm Lodī by Bābar in 1526, the defeat by Akbar in 1556 of Himū, the Hindu general of Adil Shah, and Ahmad Shah's victory over the Marāthās in 1761. An indecisive battle was fought at Pānīpat between the Sikhs and the Delhi emperor in 1767. The targana of Pānīpat was made over to general Perron by the Marathas and passed to the British in 1803. The chief monument of antiquity is the tomb of the Muhammadan saint

Kalandar (also said to be buried at Karnāl) erected by the sons KARNAL of Alā-ud-dīn of Ghor. Pānīpat was the head-quarters of the DISTRICT. District until 1854.

The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 26,400, and the expenditure Rs. 26,200. The income for 1903-04 was Rs. 27,400, chiefly derived from octroi, and expenditure Rs. 28,000. Local manufactures include brass vessels, cutlery and silvered glass, and the town has a cotton press and a combined ginning and pressing factory. The number of operatives employed in 1904 was 500. The Muhammadan community maintains an Arabic school, and the municipality an anglo-vernacular middle school. The town contains a Government dispensary.

Pehowa.—An ancient town and place of pilgrimage. situated in 29° 59' N. and 76° 35' E., in Kaithal tah-il, Karnal District, Punjab, on the sacred Saraswati river, 16 miles west of Thanesar. It lies in KURUKSHETRA, and its name is a corruption of the Sanskrit Prithudaka, the 'pool of Prithu,' the son of Rājā Vena. Two inscriptions dating from the end of the ninth century A.D., found at Pehowa, show that it was then included in the dominions of Bhoja and his son Mahendrapala, kings of Kanauj. The more important inscription records the erection of a triple temple to Vishnu by a Tomar family, but no traces of its ancient buildings remain, the modern shrines having been erected within the last century. After the rise of the Sikhs to power Pehowa came into the possession of the Bhais of Kaithal, whose palace is now used as a rest-house, but with Kaithal it lapsed to the British Government, and has since lost its importance, its population having decreased from 3,408 in 1881 to 2,080 in 1901. It is still, however, a place of pilgrimage, and close to it are the temples of Pirthūdakeshwar or Pirthūveshwar, built by the Marathas during their supremacy, in honour of the goddess Saraswati (Sarsūti), and of Swāmi Kārtik. The latter is said to have been founded before the war of the Mahābhārata in honour of the war-god Kartaya. The town has a Government dispensary.

Pundri.—A small town in the Kaithal tahsil of the Karnāl District, Punjab, situated in 29° 46' N. and 76° 34' E., on the bank of a great tank called the Pundrak tank. Population (1901) 5,834. It was formerly one of the strongholds of the Pundrs, a Rājput tribe, who held Thānesar and the Nardak. It has a vernacular middle school.

Shahabad Town.—Town in the Thanesar tabsīl, Karnāl District, Punjab, lying in 30° 10' N. and 76° 52' E., on the Delhi-Umballa-Kālka Railway, 16 miles south of Ambāla town. KARNAL DISTRICT. Population (1901) 11,009. The town was founded by one of the followers of Muhammad of Ghor at the end of the twelfth century. It is of no commercial importance. The municipality was created in 1867-68. Its average income for the 10 years ending 1902-03 was Rs. 10,900, and the expenditure Rs 10,200. The income for 1903-04 amounted to Rs. 12,300, chi-fly derived from octroi, and expenditure to Rs. 11,200. The town has a vernacular middle school and a Government dispensary.

Tirāwari (or Azamābād-i-Talāwarī, the Tarain of the earlier Muhammadan historians) .- A village in the Karnal tahsil and District, Punjab, situated in 29° 48' N. and 76° 59' E., 14 miles south of Thanesar and 84 north of Delhi, on the Delhi-Umballa-Kālka Railway. Tirāwari is identified as the scene of Muhammad of Ghor's defeat by Prithwi Raj (Rai Pithora), the Chauhan king of Ajmer, in 1191, and of the former's victory over that king in 1:92. In 1216 Taj-ud-din Yalduz, who had made himself master of the Punjab, advanced against Shams-ud-din Altamsh, but was defeated by the latter near Tarain. It derives its modern name of Azamābād from Azam Shāh, son of Aurangzeb, who was b rn in the town. In 1739 Nadir Shah occupied the place, then a fortified town, after battering its walls, and marched to encounter Muhammad Shah. A great rabāt or fortified sarai still exists at Tirawari, and the walls round the village are in excellent preservation.

Thanesar Town (Thaneswar). - Head-quarters of the .Thanesar tahsīl, Karnāl District, Punjab. It lies on the banks of the Saraswati, and on the Delhi Umballa-Kālka Railway, in 29° 59' N. and 76° 50' E. Population (1901) 5,066. It is famous as the most sacred place in the holy land of KURUK-SHETRA, its name meaning 'the place of the god' (stnaneshwara). In the time of Hiuen Tsiang Thanesar was the capital of a Vaisya dynasty, which ruled parts of the southern Punjab, United Provinces and Eastern Rajputana. In 648 A.D. a Chinese ambassador was sent to Harshavardhana of Thanesar, but found that the Senapati Arjuna had usurped his kingdom, and the dynasty then became extinct. Thanesar, however, continued to be a place of great sanctity, but in 1014 it was sacked by Mahmud of Ghazni, and although recovered by the Hindu Kaja of Delhi in 1043, it remained desolate for centuries. By the time of Sikandar Lodi it had, however, been in some measure restored, for that emperor proposed to make a raid on it to massacre the pilgrims. In 1567 Akbar witnessed its great fair, but Aurangzeb desecrated the shrine and built a castle in its sacred lake, whence his

soldiers could fire on pilgrims who attempted to bathe. KARNAL The town and neighbourhood were, at the annexation of the DISTRICT. cis-Sutlej territory in the possession of a Sikh family, but they lapsed to the British Government in 1850. Ihanesar was the head-quarters of a British District till 1862, but has since steadily declined in importance. The municipality was created in 1867. Its average income for the 10 years ending 1902 03 was Rs. 7,900, and the expenditure Rs. 7,300. The income in 1903 04 was Rs. 8,900, chiefly derived from octroi, and expenditure Rs 8,200. The town has a vernacular middle school and a Government dispensary. The bathing fairs held here on occasions of solar eclipses are the largest fairs in the Province. and are sometimes attended by half a million pilgrims.

Ambala District.—The most northerly of the plains AMBALA Districts of the Delhi Division, Punjab, lying between 30° 2' and 31° 13' N. and 76° 19' and 77° 36' E., with an area of 1,851 square Boundaries, miles It extends from the Sutlej, which separates it from the configuration, District of Hoshiarpur on the north, to the Jumna, which river systems. divides it from the District of Sahāranpur in the United Provinces, on the south east. On the north-east it is bounded by the States of Nalagarh, Patiala, Sirmur and Kalsia; on the south by the District of Karnal; and on the west by Patiala and the District of Ludhiana The District is very irregular in shape and consists of two almost separate portions. The main portion lies between the Ghaggar and the Jumna, and comprises the three tahsīls of Ambāla, Naraingarh and Jagādhri. It is formed of the plain which descends from the Siwalik hills towards the south-west. This plain is fertile, generally speaking a good alluvial loam, but intersected by torrents, which pour down from the hills at intervals of a few miles, and interspersed with blocks of stiff clay soil, which in years of scanty rainfall are unproductive, so that the tract, especially Naraingarh tahsil, is liable to famine. In this part of the District lies the Morni iláka, a hilly tract of about 93 square miles, chiefly made up of two main ridges and culminating in the Karoh peak (4,919 feet) on the Sirmur border. It is inhabited by tribes of Hindu Kanets. The second portion of the District is the Rupar sub-division, which comprises the tahsils of Rupar and Kharar, a submontane plain lying to the north between the Ghaggar and the Sutlei. This plain is of great fertility, highly cultivated, and well-wooded, with numerous mango groves, but its south-eastern extremity, which is heavily irrigated from the Ghaggar, is water-logged, and though of boundless fertility is so unhealthy as to be almost uninhabitable. The District also includes the detached tracts containing the town of KALKA and the hill cantonment of KASAULI.

AMBALA :

Jumna, each of whose beds passes through the various stages of boulders, shingle and sand, the District is traversed in every part by innumerable minor channels. The Ghaggar rises in Sirmūr State, passes through the Morni tract, crosses the District at its narrowest point, and almost immediately enters Patiāla; but near the town of Ambāla it again touches British territory, and skirts the border for a short distance. It is largely used for irrigation, the water being drawn off by means of artificial cuts. Among other streams may be mentioned the Chautang, Tangri, Baliāli, Sirvan, Boli, Budki and Sombh. The Western Jumna Canal has its head-works at Tajewāla in this District, and the Sirhind Canal takes out of the Sutlej at Rūpar.

Geology.

With the exception of the narrow submontane strip running along its north-eastern border, the whole District lies on the Indo-Gangetic alluvium. The submontane tract consists of sandstones and conglomerates, belonging to the upper tertiary (Siwālik) series of the Himālayas.*

Botany.

The District includes three, botanically, very different tracts: the southern part which belongs to the upper Gangetic plain; the Siwāliks in the north-east; and the Kasauli tract which rises to over 6,000 feet and is outer-Himālayan, with a flora much the same as that of Simla below 5,000 feet above sea level. The Kalesar forest and the Morni hills generally, which fall in the second tract, have a fairly rich Siwālik flora, with which a few Himālayan types, such as chīr or chīl (Pinus longifolia) intermingle.

Fauna.

Tigers and panthers are occasionally shot in the Kalesar forest and the Morni hills; there are a few bears about Morni, and leopards, hyænas and wolves are not uncommon, while wild hog abound. Of deer six kinds are found, sāmbar, chītal and kākar in the hill tracts, and ravine deer, black buck and hog deer in the plains.

Climate and temperature.

The climate of the plains is fairly good, though subject, owing to the nearness of the hills, to severe changes of temperature. The average mean temperature of January is 39.45 and of June 77.55. The hill station of KASAULI, owing to its moderate height and nearness to the dust of the plains, is the least esteemed for climate of the Punjab hill stations. The chief cause of

^{*} Medlicott. On the Sub-Himalayan ranges between the Ganges and Ravi, Memoirs, Geol, Survey of India, 111, part 2.

mortality is fever. Swamping caused by percolation from the AMBALA Western Jumna Canal used to affect the health of the people injuriously, but the careful realignment of the canal which has been carried out of recent years has, it is hoped, completely remedied the evil.

The rainfall varies widely in the hill, submontane and Rainfall. plain tracts, and the average fall ranges from 28 inches at Rupar to 61 at Kasauli. The District on the whole is well off in the matter of rainfall, and there are comparatively few years in which the rains fail altogether; the variations from year to year are, however, considerable. The greatest annual rainfall recorded during the 20 years 1881-82 to 1900-01 was 87 inches at Jagādhri in 1884-85, and the least 33 inches at Dādūpur in 1889-90.

The earliest authentic information with reference to this History and District is derived from the itinerary of Hiuen Tsiang, the Chinese Buddhist pilgrim of the 7th century. He found it the seat of a flourishing and civilised kingdom, having its capital at Srughna, a town identified by General Cunningham with the modern village of SUGH, near Jagadhri. The country around Ambala from its position felt the full force of every important campaign in Northern India, but receives little mention except as an appurtenance of Sirhird. Such references as occur in the Muhammadan historians are given in the articles on AMBALA and RUPAR towns. The practical interest of the local annals begins with the rise of the Sikh principalities south of the Sutlej during the latter half of the 18th century. As the central power of the empire relaxed under the blows of the Marāthās on the one side and the Afghāns on the other, numerous Sikh marauders from the Punjab proper began to extend their encroachments beyond the Sutlei, and ere long acquired for themselves the heart of the country between that river and the Jumna. When the Maratha power fell before the British in 1803, the whole tract was parcelled out among chiefs of various grades, from the powerful Rajas of Patiala, Jind and Nabha down to the petty sardar who had succeeded in securing by violence or fraud the possession of a few villages. But after Ranjit Singh began to consolidate the Sikh territories within the Punjab, he crossed the Sutlei in 1808, and demanded tribute from the cis-Sutlei chieftains.

Thus pressed, and fearing for themselves the fate which had overtaken their brethren, the Sikh princes combined to apply tor aid to the British Government. The responsibility of protecting the minor States from their powerful neighbour was accepted, and the treaty of 1809, between the British

AMBALA DISTRICT. Government and Ranjit Singh, secured them in future from encroachment on the north. Internal wars were strictly prohibited by a proclamation issued in 1811; but with this exception the powers and privileges of the chiefs remained untouched. Each native ruler, great or small, including even the descendants of private troopers of the original invading forces, had civil, criminal and fiscal jurisdiction within his own territory, subject only to the controlling authority of the Governor-General's Agent at Ambāla. No tribute was taken, nor was any special contingent demanded, although the Rajas were bound in case of war to give active aid to the Government. The right to escheats was the sole return which was asked. The first Sikh war and the Sutlei campaign of 1845 gave Government an opportunity of testing the gratitude of the chieftains. Few of them, however, displayed their loyalty more conspicuously than by abstaining from open rebellion. Their previous conduct had not been such as to encourage Government in its policy towards them, and a sweeping measure of reform was accordingly introduced, for the reduction of the privileges enjoyed by the Sikh chieftains. The Political Agency of Ambala was transformed into a Commissionership, and police jurisdiction was handed over to European officers. In June 1849, after the second Sikh war had brought the Punjab under British rule, the chiefs were finally deprived of all sovereign power. The revenues were still theirs, but the assessments were to be made by British officials and under British regulation. Even previous to this arrangement portions of the modern District had lapsed to Government by death or forfeiture; and the reforms of 1849 brought Ambala nearly to its present proportions. During the Mutiny of 1857, although incendiary fires and other disturbances gave much ground for alarm, especially at the first beginning of disaffection, no actual outbreak occurred, and the District was held throughout with little difficulty. In 1862, the dismemberment of Thanesar District brought three new parganas to Ambala; since that date there have been several alterations of boundary, the most important of which are the transfer of the Thanesar tabsil to Karnal in 1897 and the accession of Kasauli and Kalka from Simla in 1899.

Information as to the principal remains of archæological interest will be found in the articles on SUGH and SADHAURA.

The people.

The District contains 7 towns and 1,718 villages. Its population at each of the last three enumerations was: 1881,864,748; 1891,863,641; and 1901,815,880. In the decade 1891—1901 the rural population decreased by 6.6 per cent. This decrease was apparent in every tahsil, greatest in Naraingarh and least in

Jagādhri, but the towns, with the exception of Ambāla, Būriya and Sādhaura, showed an increase. This general decline is attributable to the mortality caused by cholera, fever and small-pox, and also to scarcity and emigration in the famine years. The District is divided into 5 tahsīls, Ambāla, Kharar, Jagādhri, Naraingarh and Rūpar, the head-quarters of these being at the places from which each is named. The chief towns are the municipalities of Ambala, head-quarters of the District, Jagadhri, Rupar, Sadhaura and Buriya.

AMBALA DISTRICT.

The following table shows the chief statistics of population in 1901:—

		les.	Number of—			square	variation between	s able
Tahsīl.		Area in square miles.	Towns.	Villages.	Population,	Population per s mile.	Percentage of var in population be 1891 and 1901.	Number of persons able to read and write,
Ambāla	40-1	355		295	218,006	б14'1	- 5'4	13,701
Rūpar	•••	290	1	358	139,327	480'4	- 51	5,472
Kharar	•••	370	2	369	166,267	449'4	- 57	7,122
Naraingarh	•••	436	1	317	131,042	300.2	-7.3	4,022
Jagādhri	••	406	2	379	161,238	397'I	-44	5 148
District Total	•••	* 1,851	7	1,718	815,880	440'7	- 5.6	35,465

^{*} The only figures available for the areas of tahsils are those derived from the revenue returns, and the tahsil densities have been calculated on the areas given in the revenue returns for 1900-01. The total of the tahsil areas does not agree with the District area as shown in the Census Report of 1901, in the table above and on page 95, which is the area as calculated by the Survey department. The slight difference is due to the different methods of measurement used by the Revenue and Survey departments.

About 62 per cent. of the people are Hindus, 30 per cent. Muhammadans, and 7 per cent. Sikhs. In the Rupar and Kharar tabsils the language is Panjabi, a Hindi patois being spoken in the rest of the District.

Their castes and occupa-

Jats (125,000) are the chief land-owning tribe. They are divided into two widely different classes, those of the northern tal sils being the fine sturdy type found in the Punjab proper, while to the east and south they are inferior both in physique and energy. Of the Rajputs (67,000) more than two thirds are Muhammadans. The Malis (24,000) and Sainis (26,000) are market-gardening tribes scattered throughout the District, generally as occupancy tenants, though the Sainis hold many villages in Rupar. The Malis are nearly all Hindus, the Sainis chiefly Hindus with some Sikhs. The Arains (29,000) are almost all Muhammadans, the Kambohs (9,000) chiefly Hindus or Sikhs. The Gujars (46,000) are divided almost equally between Hindus and Muhammadans; they chiefly inhabit the Jumna valley and the wild broken tract lying under the hills, and own large herds of goats. In this District the Gujars have an undeserved reputation as cattle thieves. In the Morni hills Kanets (2,500), Koris (4,000) and Brāhmans (44,000) are the chief cultivators. The Kanets claim a Rajput descent, the Koris are of menial status. The whole Morni population are a simple, orderly folk mixing as little as possible with the people of the plains. The Banias (29,000) are the most important commercial tribe, but there are also 7,000 Khattris. Of the menial tribes may be mentioned the Chamars (leather-workers, 113,000), Chuhras (scavengers, 32,000), Jhīnwars (water-carriers, 31,000), Julāhas weavers, 20,000), Kumhars (potters, 9,000), Nais (barbers, 11,000), Tarkhans (carpenters, 19,000), and Telis (oilmen, 12,000). There are 20,000 Shaikhs, 6,000 Saiyids, 16,000 Fakirs and 8,000 Jogis and Rawals. Of the total population 51 per cent. are supported by agriculture, 19 per cent. are industrial, 4 per cent. commercial, and 3 per cent. professional.

Christian missions.

The Ludhiāna American Presbyterian Mission has stations at Ambāla town and cantonment, both occupied in 1849, with out-stations at Jagādhri, Mubārakpur, Naraingarh, Rāipur and Mulāna. With a staff of 8 missionaries it supports a high school, a middle school, a school for Muhammadan girls, two for Hindu girls, and a hospital for women. The District contained 959 native Christians in 1901.

General agricultural conditions. Every tahsil except Rūpar contains a large tract of hard clay land which is fit for cultivation only when the rains are abundant. Hence the autumn harvest, which is sown by aid of the monsoon rains, is more important than the spring. The insecure parts are those in which this heavy clay soil predominates, and lie chiefly in Ambāla tahsīl and in the southern quarter of Kharar. The rest of the four tahsīls, which abut on the Himālayas, contain, with a certain proportion

of hilly country, large tracts of good alluvial loam; Rupar AMBALA tabsil is practically secure; and such insecurity as there is in the Naraingarh and Jagadhri tahsils is due rather to the character of the Rajput inhabitants than to defects of soil or climate. The District is intersected by numerous water-courses which, though to all appearance dry except after heavy rain, constitute a large reserve of moisture, and even in times of drought enable fairly good crops to be cultivated along them.

The District is held almost entirely on the pattidari and Chief agriculbhayāchāra tenures, but samīndārī lands cover about 70 square tural statistics miles, a larger proportion than in most Districts.

and principal erops,

The following table shows the main agricultural statistics in 1903-4, areas being in square miles:-

Tahsīl.		Total.	Cultivated.	Irrigated.	Culturable waste.
				Y. J. V.	
Ambāla	•••	355	274	3	38
Rūpar		290	193	28	23
Kharar		370	243	21	28
Naraingarh		456	219	5	27
]agādhri	•••	406	267	- 14	39
Tota		• 1,857	1,195	71	155

^{*} See note to table on page 95.

The chief crops of the spring harvest are wheat and gram, which in 1903-04 occupied 309 and 181 square miles respectively. Barley only covered 13 square miles. Maize, the principal crop in autumn, occupied 151 square miles; then came rice (115), pulses (95), great millet (30), and cotton (43). About 2,000 acres were under poppy. In the Morni hills mandal (Eleusine corocana), kulthi (Dolichos uniflorus), the tuber kachālu (Arum colocaria) and ginger are cultivated.

Improvements in agricult ural practice.

The area under cultivation increased from 1,171 square miles in 1800-91 to 1,195 in 1903-04, in which latter year it was 64 per cent. of the area of the District. Experiments were carried out in 1887 with a view to introducing natural khāki coloured (Nankin) cotton as a staple. The cotton was a fine strong plant with a good fibre and made up well as coarse cloth, but Government decided that it could not take the place of dyed cotton for army purposes, and the people preferred the ordinary cotton both on account of its colour and because the Nankin cotton took longer to come to maturity, and yielded a smaller proportion of fibre to seed. More recent experiments have been made with Nagpur, Egyptian and American cotton, the latter with good results as regards outturn. There is a tendency to substitute the cultivation of fine rice for coarse. Loans under the Land Improvement Loans Act are not very popular. the people preferring to borrow money from the village banker. Only Rs. 1,400 were advanced under this Act during the 5 years ending 1904, all for the construction of masonry wells. Loans for seed and bullocks are likewise not usually popular, but are readily taken in times of scarcity, when credit with the banker has failed. Rs. 31,000 were thus advanced during the 5 years ending 1903-04.

Cattle, ponies and sheep. The breed of cattle is capable of improvement, but in the alluvial lands the weak home-bred stock is quite equal to the work required, and being accustomed to stall feeding does not, like the stronger cattle imported from the upland tracts, feel the change from grazing in the open. For work in heavy clay soils or with deep irrigation wells a finer breed of cattle is imported. Hissār bulls have been introduced. A good deal of horse-breeding is carried on in the District; the District board maintains 7 horse and 5 donkey stallions. Large quantities of sheep, pigs and poultry are kept, the high prices obtainable in Simla making the keep of poultry especially remunerative.

Irrigation,

Of the total area cultivated in 1903-04, 71 square miles, or 6 per cent., were irrigated. Of this area 43 square miles were irrigated by wells, 3,396 acres by canals and 23 square miles by streams and tanks. The head-works of both the Western Jumna and Sirhind Canals lie in the District, but it receives no irrigation from the latter. About 2,500 acres are estimated as irrigable annually from the main line of the Western Jumna Canal. The District has in use 3,297 masonry wells worked by cattle, almost all on the rope and bucket system, even in the riverain tracts: also 2,095 unbricked wells, lever wells and water-lifts. The hill.

torrents afford a certain amount of irrigation. Of the crops AMBALA harvested in 1903-04, only 4 per cent. were grown on irrigated DISTRICT. land, sugarcane being the only crop irrigated to any great extent. It is proposed to add to the programme of famine relief works projects for the construction of storage tanks for purposes of rice irrigation in the clay tracts which largely depend on that crop.

The Kalesar reserved forest has an area of about 19 square Forests. miles, lying principally between two low ranges of hills on the right bank of the Jumna. The chief growth is of sal, but ebony and other trees are found. The forest contains no bamboo, but a good deal grows south of it. Near Jagadhri is a reserved plantation of shīsham (Dalbergia sissoo), and at Ambāla a military reserve of nearly 3 square miles forms the grass farm. The Morni hills are covered with a dense forest growth of scrub mixed with chil (Pinus longifolia) and many other valuable trees, including the harrar (Terminalia chebula), the fruit of which yields a considerable revenue. In 1903-04 the total revenue was Rs. 2,000.

A good deal of limestone is burnt in the Morni hills, but Minerals. since 1887 the industry has been discouraged, as it was found that much harm was being done to the forest growth by reckless cutting for fuel. The District also possesses some block kankar quarries which were largely used when the Sirhind Canal was under construction, and in the Kharar tahsil mill stones are prepared. Gold is found in minute quantities in the sand of some of the mountain torrents, especially the Sombh.

Excellent cotton carpets are made at Ambala, and the Arts and town also possesses 4 ginning factories with 369 employes (1901). 3 cotton presses with 180, and two factories in which cotton ginning is combined with flour-milling, and which between them give employment to 63 hands. The cantonment has two flourmills, one of which was working in 1904 and gave employment to 54 hands, and a factory for cabinet-making and coachbuilding with 195 hands. At SADHAURA there is a combined cotton ginning and pressing factory and flour mill, with 53 employés, and at Khanpur a combined cotton-ginning factory and flour mill with 40, while the Kalka-Simla Railway workshops at Kālka give employment to 200 operatives. A museum of industrial exhibits has lately been started in a building erected in memory of the late Queen-Empress. Rupar is famous for small articles of iron-work, and a potter in the town enjoys some celebrity for his clay modelling. The Rupar canal foundry was closed in 1901. Kharar produces good lacquer work, and Jagadhri has a well deserved reputation for its prassware. Cotton prints are made in some villages.

manufactures.

AMBALA DISTRICT. Commerce.

Ambāla town is a considerable grain mart, receiving grain and cotton from the Phülkian States and Ludhiana, and export. ing them up and down country. It imports English cloth and iron from the south, and salt, wood, woollen and silk manufac. tures from the Punjab; and exports cotton goods, especially carpets. It has a considerable trade in hill products, such as ginger, turmeric, potatoes, opium and charas, Simla and Kasauli being largely supplied from it with various necessaries. Rupar is also an important mart for commerce between the hills and plains, and has a considerable traffic in grain, sugar and indigo; salt is imported and sent to the hills in exchange for iron. ginger, turmeric and pofatoes, and country cloth is manufactured in the town and exported to the hills. Jagadhri carries on a considerable trade in metals, importing copper and iron and exporting the manufactured products. It is also a centre of the borax trade. During the American civil war, a large cotton mart was established at Kurāli where 5 lakhs are still believed to change hands yearly.

Railways and roads.

The North-Western Railway from Saharanpur to Lahore and the Delhi-Umballa-Kālka line cross each other at Ambala, the latter being continued by the narrow gauge Kalka-Simla line. The Grand trunk road passes through Ambāla, where the Kalka road for Simla leaves it. The only other important metalled roads are from Abdullahpur (via Jagādhri) to Chachrauli, the capital of the State of Kalsia, and from Buriya to Jagadhri. The total length of metalled roads is 103 miles, and of unmetalled 404. Of these 87 miles of metalled and 32 miles of unmetalled road are under the Public Works department, and the rest belong to the District board. Both the Sirhind and Western Jumna Canals are navigable, taking to a large extent the place of the rivers which they drain almost dry, except in the summer months. The Jumna is crossed by a ferry, which is replaced in the cold weather by a bridge of boats, and the Sutlei by three.

Famine.

The Ambāla District has only once suffered from serious famine since its formation in 1847. This was in 1860-61, when wheat rose to 8 seers a rupee. Regarding the distress in 1868-69 very little is recorded. The total number returned as employed on relief works was 46,000, and 57,000 received gratuitous relief. Only about Rs. 2,500 was spent from subscriptions, to which Government added Rs. 2,500. The crop failed in 1884-85 and 1890. The famine of 1896-97 was due, not so much to any actual failure of the crops in the District (though the spring harvest of 1897 was the third poor harvest in succession), as to the state of the grain market all over India. For months together the

prices of all food-grains stood at about 10 seers per rupee in AMBALA rural tracts, and in the towns, when prices were highest, wheat rose to 7 seers, maize (the staple food of the people) and gram to 8 seers, and the District only escaped worse calamities than it actually suffered owing in no small degree to the resources of the small capitalists. The greatest daily average relieved was 5.279. Rs. 36,600 was spent from District funds on gratuitous and all other forms of relief, and Rs. 15,000 was received from the Indian Charitable Famine Relief Fund. In the famine of 1899-1900, though prices did not rise so high, the crop failure was more complete; there were heavier losses of cattle, and credit was harder to obtain. The greatest daily number relieved did not, however, exceed 816; the expenditure from District funds was Rs. 4,176, and from the Charitable Relief Fund Rs. 4,925.

The District is divided for general administrative purposes District subinto 5 tahsils, -AMBALA, JAGADHRI, NARAINGARH, RUPAR and divisions and KHARAR, the last two forming the Rupar sub-division. Each staff. tahsil has a tahsildar and naib-tahsildar. The District is in charge of a Deputy Commissioner, aided by 6 Assistant or Extra Assistant Commissioners, of whom one is sub-divisional officer in charge of Rupar, and one is in charge of the District freasury. Ambala is the head-quarters of the Deputy Inspector-General of Police, Eastern Range, of an Executive division of the Public Works department.

The Deputy Commissioner as District Magistrate is res- Law and ponsible for the criminal justice of the District. The civil justice. judicial work is under a District Judge, and both officers are controlled by the Divisional Judge of the Ambala Civil Division: the District Judge has three Munsifs under him, one at headquarters, one at Jagadhri and one at Rupar. There are also cantonment magistrates at Ambāla and Kasauli, with an assistant cantonment magistrate at the former place, and 7 honorary magistrates. The predominant forms of crime are burglary and cattle theft.

In the revenue history two periods of chaos have to Landrevenue be distinguished: the first between 1763 and 1800, when administrathe Sikhs having crossed the Sutlej proceeded to divide the country among themselves and rule it with degrees of extortion which varied with the position, necessities and temperament of individual rulers; the second between 1800 and 1847, the period of British protection, when confiscation followed escheat, and so called settlement followed either, under conditions so diverse as to baffle any uniformity of treatment, whether fiscal or historical.

Land revenue administra tion.

The summary settlements were invariably pitched too high, the demand being fixed by simply commuting at cash rates the grain collections made by the Sikhs. The only data were the ascounts of the former payments and estimates made by leading men, no unbiassed financiers, as their revenue assignments rose and fell with the Government demand.

A regular settlement for the whole cis-Sutlej tract was carried out between 1847 and 1855 and remained practically unaltered until the revision commenced in 1882. The assessment, though not unduly light, was fair and, helped by the rise of prices that began in 1860, was worked without any difficulty. The Jagādhri tahsīl was re-settled in 1882—89, and the rest of the District between 1883 and 1889. The average assessment on dry land is R. 1-36 (maximum Rs. 2-2; minimum 5 annas), and that on wet land is Rs 3-10 (maximum Rs. 5; minimum Rs. 2-4). The result of these revisions was an increase of one lakh in the assessment of the whole District. The demand, including cesses, for 1903-04 was 138 lakhs. The average size of a proprietary holding is 2.7 acres.

The total collections of revenue and those of land revenue alone are shown below, in thousands of rupees:—

	1880-81.	1890 91.	1900-01.	1903-04.
Land Revenue	7,83,	8,39,	6,61,	7,45,
	11,11,	12,95,	12,26,	14,54,

Local and municipal.

The District contains 5 municipalities, AMBALA, RUPAR, JAGADHRI, SADHAURA and BURIYA, and two notified areas or embryo municipalities, KHARAR and KALKA. Outside these towns local affairs are managed by a District board, whose income amounted in 1903-04 to 1.2 lakhs, while its expenditure was 1 I lakhs, education accounting for one-fifth of the total.

Police and

The regular police force consists of 803 of all ranks, of whom 148 are cantonment and 86 municipal police, and is under a Superintendent, who usually has one Assistant and one Deputy Superintendent, and 5 Inspectors under him. The village-watchmen number 1,792, including 31 dafadārs. The District has 17 police stations, 2 out-posts, and 6 road-posts. The District jail at head-quarters has accommodation for 856 prisoners.

The District stands oth among the 28 Districts of the ANGALA Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 4.3 per cent. (7 5 males Education. and '4 females). The number of pupils under instruction was in 1880-81, 5,262, in 1900-01, 9,359, and in 1903-04, 8,906. In the last year the District possessed it secondary, 99 primary public schools, 3 advanced and 69 elementary private schools, there being 421 female scholars in the public and 303 in the private schools The Mission school in Ambala town was the only high school of the District until Government opened one at Jagadhri. The District possesses 6 girls' schools. Its total expenditure on education in 1903-04 was 2.4 lakhs, of which the bulk was provided by imperial and provincial funds and endowments.

DISTRICT.

The District contains a civil hospital at Ambala town, and 7 Hospitals and outlying dispensaries. In 1904 a total of 98,679 out-patients and dispensaries. 1,982 in-patients were treated at these institutions, and 8,697 operations performed. The aggregate expenditure came to Rs. 21,000, which was met in nearly equal shares by District and municipal funds, assisted by a grant from Government of Rs. 2.000. A description of the Pasteur Institute and Research Laboratory will be found under KASALLI. There is a leper asylum at Ambala under the American Presbyterian Mission. The Philadelphia Hospital for women at Ambala is also under American management.

The number of successful vaccinations in 1903-04 was 15,708, Vaccination. representing 20 per thousand of the population. Vaccination is compulsory in Ambala and Rupar towns.

[A. Kensington, Customary Law of Ambāla District 1883, District Gazetteer, 1892-93, and Seitlement Report, 1882; J. M. Douie, Settlement Report of Karnāl-Amhāla, 1891.]

Ambala Tahsil.—The south-western tahsil of the Ambala District, Punjab, lying between 30° 7' and 30° 27' N. and 76° 33' and 77° 12' E., with an area of 355 square miles. Its population was 218,006 in 1901, compared with 230,567 in 1891. The head-quarters are at the town of Ambala (population 78,638). It also contains 295 villages, and the land revenue and cesses amounted in 1903-04 to 2.8 lakhs. The tahsil lies in the open plain, and the hard clay subsoil is almost everywhere covered with alluvial loam.

Rupar Sub-division.—Sub-division in the Ambala District, Punjab, including the tahsils of RUPAR and KHARAR. Kharar contains the cantonment and sanitarium of KASAULI, and the notified area of KALKA.

Rupar Tahsil.—The northern tahsil of the Ambala District, Punjab, lying at the foot of the Himālayas, between

30° 45' and 31° 13' N. and 76° 19' and 76° 44' E, with an area of 290 square miles. It is bounded on the north by the Sutlej river and forms part of the Rūpar sub-division. On the northeast the tahsil runs up into the lower Siwāliks, and along the Sutlej is a narrow strip of lowlying country. The rest of the tahsil consists of a loam plateau rich in wells, and intersected by mountain torrent-beds. The head-works of the SIRHIND CANAL are at Rūpar. The population of the tahsil was 139,327 in 1901, compared with 146,816 in 1891. The head-quarters are at the town of RUPAR (population 8,888). It also contains 358 villages, and the land revenue and cesses amounted in 1903-04 to 28 lakhs.

Kharar.—Tahsil of the Ambāla District, Punjab, lying at the foot of the Himālayas, between 30° 34′ and 30° 56′ N. and 76° 32′ and 76° 55′ E., with an area of 370 square miles, and forming part of the Rūpar sub-division. Its population was 166,267 in 190;, compared with 176,298 in 1891. It contains 369 villages, among which is the village of Kharar, the tahsīl head-quarters, and the land revenue and cesses amounted in 1903-04 to 3'1 lakhs. For administrative purposes the hill station of KASAULI (2,192) and the town of KALKA (7,045) are included in this tahsīl. The north of the tahsīl lies in the Siwāliks. Between the hills and the Ghaggar, in the east, is an unhealthy tract of jungle and rice fields. The soil in the centre and west is a fertile loam, which in the south stiffens into clay. Communications are everywhere rendered difficult by the torrent beds which intersect the country.

Naraingarh.—Tahsil in the Ambāla District, Punjab, lying at the foot of the Himālayas, between 30° 19' and 30° 45' N. and 76° 52' and 77° 19' E., with an area of 436 square miles. Its population was 131,042 in 1901, compared with 141,326 in 1891. It contains the town of SADHAURA (population 9,812) and 317 villages, among which is Naraingarh, the tahsil head-quarters. The land revenue and cesses amounted in 1903-04 to 2'3 lakhs. The tahsil includes a tract of hilly country on the north, culminating in the Karoh peak, 4,919 feet above the sea. The lower hills are devoid of vegetation, and below them comes a tract of rough stony country much cut up by ravines, the perpetual development of which is a most serious difficulty for the farmer. The southern half of the tahsil is fairly level.

Jagādhri Tahsīl.—The eastern tahsīl of the Ambāla District, Punjab, lying at the foot of the Himālayas, between 30° 2′ and 30° 28′ N. and 77° 4′ and 77° 36′ E., with an area of 406 square miles. It is bounded on the south east by the river Jumna, which separates it from the United Provinces. Its population was 161,238 in 1901, compared with 168,634 in 1891. It

contains the towns of JAGADHRI (population 13,462) and BURIYA AMBALA (5,865), and 379 villages, and the land revenue and cesses amounted in 1903-04 to 29 lakhs. The tahsil includes a small tract of hilly country in the Swaliks. On the east lie the Jumna lowlands. The rest of the tahsil is generally level or gently undulating, and is intersected by torrent beds.

Manauli.—An estate in the Kharar and Rupar tahsils of the Ambāla District, Punjab, with an area of 11 square miles. It was the principal jāgīr held till lately by a member of the great Faizullahpuria or Singhpuria family, which was one of the twelve great Sikh misls or confederacies. Founded early in the 18th century by Kapūr Singh, a Jat of the Amritsar District, the family played a great part in the Jullundur Doab under his great-nephew, Budh Singh. In 1811, however, the Singhpurias were expelled from their territories north of the Sutlej by Ranjit Singh's generals and confined to the estates south of that river, which they still hold. From 1809 to 1847 the family ranked as independent protected chiefs, but they lost their status in the latter year. The last owner, Sardar Raghubīr Singh, held 81 villages in jāgir. These yield a net revenue of Rs. 36,000, and the Sardar had also other estates. After his death in 1904, the jagir was divided among a number of his relatives.

Ambāla_Town.—Head-quarters of the Ambāla tahsīl and District, Punjab, situated in 30° 23' N. and 76° 46' E., on the North-Western Railway and Grand trunk road at the point where they are crossed by the Delhi-Umballa-Kālka Kailway, distant by rail from Calcutta 1,077 miles, from Bombay 1,105 miles, and from Karāchi 848 miles. The population (1901) is 78,638, namely, Hindus 39,601, Sikhs 2,168, Muhammadans 32,149, and Christians 3,610, of whom 50,438 reside in canton-Ambāla is chiefly important as being one of the largest cantonments in India. The garrison, which is under the General Officer Commanding the Lahore division, consists of artillery, British and native cavalry, and British and native infantry. The cantonment also contains a mounted infantry school, companies of the army hospital and bearer corps, and detachments of the Punjab Light Horse and North-Western and East Indian Railway Volunteers.

The native town, which has a separate station on the North-Western Railway, lies 4 miles north-west of the cantonment. Its name is possibly derived from its mythical founder Amba, but is more probably a corruption of Ambwala, the 'mango village.' It was of no importance before the lapse of the Ambala estate in 1823, when it became the residence of the Political Agent for the cis-Sutlej States. The cantonment was established



in 1843, and in 1849 it became the head-quarters of a District. The civil lines are situated near the town, and contain, besides the usual offices, a jail and hospital. The town is well situated as a commercial centre and is an important cotton and grain market. It also forms a depôt for the supply of Simla and carries on a considerable trade in hill products, such as ginger and turmeric. The article on the AMBALA District gives details of the modern industries. A branch of the Alliance Bank of Simla has been established in the cantonment.

The municipality was created in 1867 I's average income for the 10 years ending 1902-03 was Rs 56,200, and the expenditure Rs. 54,300. Its income in 1903 of amounted to Rs 70,700, the chief source being octroi (Rs 45,200), and the expenditure to Rs. 71,900, the principal items being drainage and water-supply (Rs. 22,400), medical (Rs. 8,100), conservancy (Rs. 5,800), education (Rs. 6,100), public safety (Rs. 7,500) and general administration (Rs. 9,400). The average income and expenditure of the cantonment fund during the same period were 1'3 lakks. Ambāla has 3 high schools, and 2 middle schools, besides a civil hospital.

Būriya.—A town in the Jagādhri tahsil, Ambāla District, Punjab, situated in 30° 10' N. and 77° 22' E., 3 miles north of the North-Western Railway. Population (1901) 5,865. Founded in the time of the emperor Humāyūn it was captured by the Sikhs in 1760, and became the head quarters of a considerable principality, one of the nine which were exempted from the reforms of 1849, and allowed to retain a certain amount of independence for some time after the reduction of the other cis. Sutlej chiefs to the position of jāvīrdārs. Part of the estate has now lapsed, and part is held in jāgīr by the Būriya family. The town is of no commercial importance. The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 4,300, and the expenditure Rs. 5,100. The income in 1903-04 amounted to Rs. 4,500, chiefly from octroi, and expenditure to Rs. 4,400. It maintains a vernacular middle school.

Jagādhri Town.—Head quarters of the Jagādhri tahsīl, Ambāla District, Punjab, situated in 30° 10' N. and 77° 18' E., about 5 miles north of the North-Western Railway, on the metalled road connecting Ambāla and Sahāranpur. Population (1901) 13,462. It owes its importance to the Sikh chief Rai Singh of Būriya, who settled a commercial and manufacturing population here. The town had been entirely destroyed by Nādir Shāh, but rebuilt by Rai Singh in 1783. It lapsed to the

British Government in 1829. The name is said to be a AMB. Corruption of Ganga Dhair, so called from a store of Ganges water enshrined in the foundations. Jagādhri is noted for its manufacture of iron and brass ware. Borax, imported from the hills, is also refined, and oxide of lead manufactured. The municipality was created in 1867. Its average income for the 10 years ending 1902-03 was Rs. 24,700, and the expenditure

Rs. 24.300. The income in 1903 o4 was Rs. 25,700, chiefly from octroi, and the expenditure Rs. 25,500. It maintains an anglo-vernacular high school and a Government dispensary.

Kālka.—A town and notified area attached for administrative purposes to the Kharar tahsīl, Ambāla District, Punjab, and junction of the Delhi-Umballa-Kālka and Kālka-Simla Railways, situated in 30° 50′ N. and 76° 57′ E, at the foot of the outlying range of the Himālayas at an elevation of 2,400 feet, and entirely surrounded by Patiāla territory. Population (1901) 7,045. Kālka was acquired from Patiāla in 1843 as a depôt for Simla; it is also an important market for hill produce, such as ginger and turmeric. There is a considerable manufacture of mill stones, and a railway workshop is situated here, which employed 200 hands in 1904.

Kasauli.—A hill station and cantonment in the Punjab. situated in 30° 53' N. and 76° 58' E., entirely surrounded by Native States, but attached for administrative purposes to the Kharar tahsil of the Ambala District. It lies on the summit of the long ridge overlooking Kalka, at an elevation of 6,335 feet above the sea, and nearly 4,000 feet above Kalka, from which it is distant about 9 miles. Population (1901) 2,192. Kasauli was founded in 1842 as a military station, and now serves as a convalescent depôt. It has during the summer months a considerable civil population for whose accommodation hotels have been built. Owing, however, to its nearness to the plains, it is the least attractive in climate of the Punjab hill stations. The management of the station is in the hands of a Cantonment Magistrate assisted by a cantonment committee; the Cantonment Magistrate proceeds on tour for 10 days in each month of the hot weather, and is relieved of the charge of the treasury by the Assistant Commissioner in charge of the Rupar sub-division. The Deputy Commissioner of Ambāla also takes his work to Kasauli for part of the hot weather. There is an anglo-vernacular middle school. The Lawrence Military Asylum at Sanawar is 3 miles away, in a portion of territory attached to Simla District. The income and expenditure of cantonment funds during the 10 years ending 1902 03 averaged Rs. 13,000.

Ambala District. BALA STRICT. The Pasteur Institute at Kasauli was established in 1901 for the treatment of persons bitten by rabid animals, and now treats patients from all parts of Northern India. In 1906 a central Research Institute was founded, which will provide means for the scientific study of the etiology and nature of disease in India besides the preparation of curative sera for the diseases of man and the training of scientific workers. The institution is in charge of a Director with a staff of assistants. Kasauli is also the head-quarters of the Punjab Nursing Association, and contains a Government dispensary. There is a brewery in the neighbourhood.

Rupar town—Head quarters of the Rupar sub-division and tahsīl, Ambāla District, Punjab, situated in 30° 58' N. and 76° 32' E. at the point where the Sutlei issues from the hills. Population (1901) 8,888. It is a town of considerable antiquity, originally called Rupnagar after its founder Raja Rup Chand. It was occupied about 1763 by Hari Singh, a Sikh chieftain, who seized upon a wide tract south of the Sutlei, stretching along the foot of the Himalayas. In 1702 he divided his estates between his two sons, Charrat Singh and Dewa Singh, the former of whom obtained Rupar. The estates were confiscated in 1846 in consequence of the part taken by the family during the Sikh war of the preceding year. The head-works of the Sirhind Canal are situated here, and the town is an important mart of exchange between the hills and plains. Salt is largely imported from the Khewra mines and re-exported to the hills in return for iron, ginger, potatoes, turmeric, opium and charas. Cotton twill (sūsi) is largely manufactured, and the smiths of Rupar have a reputation for locks and other small articles of iron. Rupar was the scene of the celebrated meeting between Lord William Bentinck and Ranjit Singh in 1831. There are two important religious fairs, one Hindu, one Muhammadan. The municipality was created in 1857. The average income for the 10 years ending 1902-03 was Rs. 12,100 and the expenditure Rs. 11,400 The income in 1903-04 amounted to Rs. 14,500, chiefly from octroi, and expenditure was Rs. 16,900. There are three anglo-vernacular middle schools and a Government dispensary.

Sādhaura—A town in the Naraingarh tahsīl of the Ambāla District, Punjab, situated in 30° 23′ N. and 77° 13′ E., at the foot of the outlying range of the Himālayas. Population (1901) 9,812. It dates from the time of Mahmūd of Ghazni, and has a mosque built in the reign of Shāh Jahān. A large fair held yearly at the shrine of the Muhammadan saint, Shāh Kumais, is attended by 20,000 or 30,000 persons. There is

some manufacture of cotton cloth, and the town boasts a AMBAEA steam printing press, and a combined cotton-ginning and DISTRICT. pressing factory, which in 1904 employed 55 hands. municipality was created in 1885. The average income for the 10 years ending 1902-03 was Rs. 6,800 and the expenditure The income in 1903-04, amounted to Rs. 7,300, Rs. 6,400. chiefly from octroi, and the expenditure was Rs. 8,100. There is a vernacular middle school and a Government dispensary.

Sugh (Srughna).—A petty village, in Jagādhri tahsīl. Ambāla District, Punjab, situated in 30°9' N. and 77° 23' E., in a bend of the old bed of the Jumna, now a part of the Western Jumna Canal, close to Jagadhri and Buriya towns. Population (1901) 378. Srughna is mentioned by Hiuen Tsiang, the Chinese pilgrim of the 7th century, as a town 3½ miles in circuit, the capital of a kingdom and seat of considerable learning, both Buddhistic and Brahmanical. He describes the kingdom of Srughna as extending to the mountains on the north, and to the Ganges on the east, with the Yamuna or Jumna flowing through the midst of it. I'he capital he represents as having been partly in ruins; but General Cunningham thinks that there is evidence in the coins found on the spot to show that it was occupied down to the time of the Muhammadan conquest. He thus describes the extent and position of the ruins:-

'The village of Sugh occupies one of the most remarkable positions that I have seen during the whole course of my researches. It is situated on a projecting triangular spur of high land, and is surrounded on three sides by the bed of the old Jumna, which is now the Western Jumna Canal. On the north and west faces it is further protected by two deep ravines, so that the position is a ready-made stronghold, which is covered on all sides, except the west, by natural defences. In shape it is almost triangular, with a large projecting fort or citadel at each of the angles. The site of the north fort is now occupied by the castle and village of Dayalgarh. The village of Amadalpur stands on the site of the south-east fort, and that of the south-west is unoccupied. Each of these forts is 1,500 feet long and 1,000 feet broad, and each face of the triangle which connects them together is upwards of half a mile in length, that to the east being 4,000 and those to the north-west and south-west 3,000 feet each. The whole circuit of the position is therefore 22,000 feet or upwards of four miles, which is considerably more than the 31 miles of Hwen Thsang's measurement. But as the north fort is separated from the main position by a deep sandy ravine, called

the Rohāra nāla, it is possible that it may have been unoccupied at the time of the pilgrim's visit. This would reduce the circuit of the position to 19,000 feet or upwards of $3\frac{1}{2}$ miles, and bring it into accord with the pilgrim's measurement. The small village of Sugh occupied the west side of the position, and the small town of Buriya lies immediately to the north of Dayālgarh.'

SMLA DISTRICT.

Boundaries configuration, and hill and river systems. Simla District Shamla).—A District in the Delhi Division, Punjab, consisting of 9 small tracts lying among the SIMLA HILL STATES, between 30° 58′ and 31° 22′ N. and 77° 7′ and 77° 43′ E., with a total area of 101 square miles. The town lies on the spurs which run down from Jakko hill, and occupies an area of only 6 square miles. North-east of it lie the parganas of Kot Khai and Kotgarh, the former 32 miles by road from Simla in the valley of the Giri, the latter 22 miles (50 by road) on a northern spur of the Hātu range overlooking the Sutlej valley. The Bharauli tract is a narrow strip of hill-country, extending from Sabāthu to Kiārighāt, about 8 miles long and from 2 to 6 wide. Besides these tracts, the cantonments of Jutogh, Sabāthu, Solon, Dagshai and Sanāwar, the site of the Lawrence Military Asylum, are included in the District.

The hills and the surrounding Native States compose the southern outliers of the great central chain of the western Himālayas. They descend in a gradual series from the main chain itself in Bashahr State to the general level of the Punjab plain in Ambāla District, thus forming a transverse south-westerly spur between the great basins of the Ganges and the Indus, here represented by their tributaries, the Jumna and the Sutlej. A few miles north-east of Simla the spur divides into two main ridges, one of which curves round the Sutlei valley towards the north-west, while the other, crowned by the sanitarium of Simla, trends south-eastward to a point a few miles north of Sabathu, where it merges at right angles in the mountains of the outer or sub-Himalayan system, which run parallel to the principal range. South and east of Simla the hills between the Sutlej and the Tons centre in the great peak of CHAUR, 11,082 feet above the sea. Throughout all the hills, forests of deodar abound, while rhododendrons clothe the slopes up to the limit of perpetual snow. The scenery in the immediate neighbourhood of Simla itself presents a series of magnificent views, embracing on the south the Ambala plains, with the Sabāthu and Kasauli hills in the foreground, and the massive block of the Chaur a little to the left; while just below the spectator's feet a series of huge ravines lead down into the deep valleys which score the mountain-sides. Northwards, the eye wanders over a net-work of confused chains, rising range above range, SIMIA DISand crowned in the distance by a crescent of snowy peaks, standing out in bold relief against the clear background of the The principal rivers of the surrounding tracts are the Sutlei, Pabar, the Giri Ganga, the Gambhar, and the Sarsa.

The rocks found in the neighbourhood of Simla belong Geology. entirely to the carbonaceous system and fall into four groups, the Krol, the infra-Krol, the Blaini, and the infra-Blaini, or Simla slates. The Simla slates are the lowest beds seen; they are succeeded by the Blaini group, consisting of two bands of boulder-slate, separated by white weathering slates (bleach slates), and overlain by a thin band of pink dolomitic limestone. The Blaini group is overlain by a band of black carbonaceous slate, which follows the outcrop of the Blaini beds. The overlying beds consist of a great mass of quartzite and schist, known as the Boileaugani beds; they cover the greater part of Simla and extend to Jutogh. Above these is the Krol group, consisting of carbonaceous slates and carbonaceous and crystalline limestones, with beds of hornblende-garnet schist which probably represent old volcanic ash beds; they are largely developed in Prospect Hill and Jutogh; intrusive diorite is found among the lower limestones of the Krol group on the southern slopes of Jutogh. No fossils have been found in any of these rocks, and in consequence their geological age is unknown.*

In the Flora Simlensis (edited by Mr. W. B. Hemsley), the Botany. late Sir Henry Collett has enumerated 1,237 species of trees and flowering plants, but this number would be raised considerably if a botanical census of the smaller Native States were available, and the Alpine region in Bashahr including Kanawar, with which the work does not deal, were added. Deodar, pines, and firs, several oaks and maples, a treerhododendron, the Himālayan horse chestnut, and different kinds of buck thorn and spindle tree (Rhamnus and Enonymus). and of Ficus with Celtis, are common; climbers such as ivv. vines and hydrangea are frequent, with a host of shrubs and herbs belonging to familiar European genera. In Bashahr the Alpine flora is varied and plentiful; while that of Kanawar is almost purely Tibetan.

^{*} McMahon, The Blaini group and Central Gneiss in the Simla Himā-layas. Records Geol. Survey, India, X, Part 4; Oldham, Geology of Simla and Jutogh; Records Geol. Survey, India, XX, Part 2; L'anual of Geology of India, and Edition, page 132 (the carboniceous system)

SIMLA DISTRICT. Fauna. The panther and bear are common in the Simla hills. The aimu or serow, the gural, the kākar, or barking deer and the musk-deer are found Pheasants of various kinds are found in the higher ranges, while chikor and jungle fowl abound on the lower.

Climate and temperature.

The climate is admirably adapted to the European constitution, and the District has therefore been selected as site of numerous sanitaria and cantonments. There are four seasons in Simla. The winter lasts from December to February, when the mean maximum temperature ranges from 40° to 44°, while sharp frosts and heavy snow bring the mean minimum sometimes down to 34°. The temperature rises rapidly from February to March, and from March to June hot weather conditions prevail, the mean maximum ranging from 56° in March to 74° in June. The maximum recorded during late years was 94° in May 1879. The rainy season extends from July to September. About the middle of September the monsoon currents withdraw, and during October and November fine weather prevails with rapidly falling temperature. Cholera visited Simla, Sabāthu and Dagshai in 1857, 1867, 1872 and 1875, though one or other station escaped in each visitation. In 1857 the death-rate among Europeans from cholera was 3'5 per thousand, and in 1867 4'2 per thousand. Goitre, leprosy and stone are prevailing endemic diseases, and syphilis is said to be very common amongst the hill people.

Rainfall.

The average rainfall per annum is 65 inches at Simla, 46 at Kotgarh and 40 at Kilba. During the three monsoon months the average fall at Simla is 41 inches.

History.

The acquisition of the patches of territory composing Simla District dates from the period of the Gurkha war in 1815-16. At a very early time the Hill States, together with the outer portion of the Kāngra District, probably formed part of the Katoch kingdom of Jālandhar (JULLUNDUR); and, after the disruption of that principality, they continued to be governed by petty Rājās till the beginning of the 19th century. After the encroachments of the Gurkhas had led to the invasion of their dominions in 1815, the British troops remained in possession of the whole block of hill country between the Sārdā and the Sutlej. Kumaon and Dehra Dūn became a portion of British territory; a few separate localities were retained as military posts, and a portion of Keonthal State was sold to the Rāiā of Patiāla. With these exceptions, however, the tract

conquered in 1815 was restored to the hill chiefs, from whom SIMEA it had been wrested by the Gurkhas. Garhwal State became DISTRICT. attached to the United Provinces; but the remaining principalities rank among the dependencies of the Punjab, and are known collectively as the SIMLA HILL STATES. From one or other of these, the plots composing the little District of Simla have been gradually acquired. Part of the hill over which the Simla hill station spreads was retained by Government in 1816, and an additional strip of land was obtained from Keonthal in 1830. The spur known as Jutogh, 31 miles from the centre of the station, was acquired by exchange from Patiala in 1843, as the equivalent of two villages in Bharauli. Kot Khai and Kotgarh, again, fell into our hands through the abdication of the Rana, who refused to accept charge of the petty State. Sabāthu hill was retained from the beginning as a military fort; and the other fragments of the District have been added at various dates. As a result of some administrative changes made in 1899 Kasauli and Kalka, which till then belonged to the District, were transferred to Ambāla.

The District contains 6 towns and 45 villages. Its population The people. at each of the last three enumerations was: 1881, 36,119; 1891, 35,851; 1901, 40,351. It increased by 12.6 per cent. between 1891 and 1901. These enumerations having been made in the winter do not give an adequate idea of the summer population which in Simla town alone was in the season of 1904, 45,587 (municipal limits 35,250, outside area 10,337). The District is divided into the two sub-tahsils of Simla-cum-Bharauli and Kot Khai-cum-Kotgarh, with head. quarters at Simla and Kot Khai, respectively. The only town of importance is Simla, the summer head-quarters of the Imperial Government; the cantonments have already been mentioned. The village population is almost entirely Hindu, the few Muhammadans which it includes being for the most part travellers. The density of population is 390.5 persons to the square mile. The language spoken in the villages is Pahari.

The Kanets (9,000) are by far the most important element Their castes in the rural population. Like all hill tribes they are a simple. and occupaminded orderly people, quiet and peaceful in their pursuits and submissive to authority. The Dagis and Kolis (4,000) are the principal menial tribes. About 39 per cent. of the total population are returned as agricultural.

The Simla Baptist Mission was started in 1865. The Christian American Presbyterian Mission has an outstation at Sabathu,

occupied in 1837, and supports a leper asylum and various schools. The Kotzarh branch of the Church Mission Society established in 1840 is an itinerant mission to the hill tribes. The Church Mission Society also has a branch, with a mission church, in Simla, and the Society for the Propagation of the Gospel Zanāna Mission has a station. In 1901 the District contained 358 native Christians.

Cultivation is carried on in all the lower valleys. Wherever the slope of the ground will permit fields are built up in terraces against the hill side, the earth often having to be banked up with considerable labour. The only classification of soil recognised by the people is that depending on irrigation and manure; lands irrigated or manured generally yield two crops in the year, while the poor sloping fields lying at some distance from the homestead, and neither irrigated nor manured, only yield catch crops either of wheat or barley in the spring or of the inferior autumn grains. Every husbandman has, besides his plot of cultivated land, a considerable area of grass land which is closed to grazing when the monsoon rains begin and reaped in October and November.

The area dealt with in the revenue returns of 1903-04 was 77 square miles, of which 36 per cent. were not available for cultivation, 44 per cent. were culturable waste other than fallows and 9,956 acres or 20 per cent. were cultivated. The chief crop of the spring harvest is wheat which occupied 3,586 acres in that year; the area of barley was 1,534 acres; practically no gram is grown. There were 274 acres under poppy. Maize and rice are the principal staples of the autumn, and covered 1,560 and 875 acres, respectively. Of millets china and mandal (Eleusine coracana) (951), and of pulses māsh (Phiseolus radiatus) and kulthi (Doichos uniforus) are the most common. Potatoes, hemp, turmeric and ginger are largely cultivated. Tea is grown at Kotgarh, where 51 acres were picked in 1904.

No increase worth mention has occurred in the cultivated area during the last 10 or 15 years; the demand made by the expansion of Simla town on the surrounding hills being rather for grass, wood and labour than for agricultural produce. Practically no advances are taken by the people from Government.

The cattle are of the small mountain breed. Very few ponies are kept, and the sheep and goats are not of importance.

Of the total area cultivated in 1903-04, 745 acres, or nearly 7 per cent., were irrigated by small channels, by which the waters of the hill streams were led to and distributed over the terraced Irrigation. fields.

DISTRICT.

Forests of timber abound, but only a small part of the Simla Forests. Forest division lies within British territory, the greater portion being leased from the Rajas of the various States. In 1903-04. the District contained 13 square miles of reserved and 510 acres of unclassed forest under the Forest department, and 33 square miles of unclassed forest and Government waste lands under the control of the Deputy Commissioner. It also contains 457 acres of reserved and 2,678 of unclassed forest belonging to the Simla municipality and preserved as the catchment area for the Simla water-supply. In 1903-04 the total revenue of the forests under the Forest department was Rs. 10,000.

The only mineral product of importance is iron, which is Minerals. found largely in the Kot Khai tract and smelted roughly by the natives.

Most of the artistic industries of Northern India are repre- Arts and sented in Simla town by artisans who come up for the manufactures. season, but very few really belong to the District. Shawls are made at Sabathu by a colony of Kashmiris; basket-weaving and some rough iron smelting at Kot Khai are the only indigenous arts.

There is a considerable trade with Chinese Tibet, which is Commerce. registered at Wangtu near Kotgarh. Most of the trade, however, is with Rampur in Bashahr. Imports are chiefly wool, borax and salt, and exports cotton piece goods. The principal imports from the plains are the various articles of consumption required by the residents at Simla.

The Kalka-Simla Railway (2' 6" gauge) has its terminus Railways and at Simla, which is also connected with Kalka by a cart road roads. and a road through Kasauli. The Hindustan-Tibet bridle road leads from Simla to Rampur and Chini in Bashahr, and a road from Sultanpur in Kulū joins this at Nārkanda, forming the easiest line of communication between Simla and Leh. A road to Mussoorie branches off from that to Rampur. Another runs westwards to Bilaspur, whence it lear's to Mandi and Suket on one side, and to Nadaun and Kangra on the other. Sabathu, Dagshai, Solon, Sanawar and Kasauli are all connected by cross roads.

The District has never been visited by famine, the rainfall Famine, being constant, and the crops always sufficient for the wants of its small agricultural population.

SIMLA DISTRICT.

District subdivisions and staff. The two sub-tahsīls, SIMLA-cum-BHARAULI and KOT KHAI-cum-KOTGARH, are each under a naib tahsīldār. The Deputy Commissioner, who is also Superintendent of Hill States, is aided by two Assistant or Extra Assistant Commissioners, of whom one is in charge of the District treasury. Simla and the Hill States form an executive division of the Public Works department and a forest division.

Law and justice.

The Deputy Commissioner as District Magistrate is responsible for the criminal justice of the District: civil judicial work is under a District Judge; and both officers are controlled by the Divisional Judge of the Ambāla Civil Division (who is also Sessions Judge). The District Judge is also Judge of the Small Cause Courts of Simla and Jutogh. The Cantonment Magistrate of Kasauli, Jutogh, Dagshai, Solon and Sabāthu has jurisdiction throughout the District. He also has the powers of a Small Cause court in all these cantonments except Jutogh. The station staff officers of Dagshai, Solon, Sabāthu and Jutogh are appointed magistrates of the 3rd class in the District, but only exercise powers within their own cantonments. The District is free from serious crime.

Land revenue administration. Little is known of the revenue systems which obtained in the Simla hills before annexation. After various summary settlements made between 1834 and 1856 a regular settlement was made between 1856 and 1859, the rates varying between Rs. 5-14-0 per acre on the best irrigated land and R. 0-3-8 on the worst kind of dry land. In 1882 the assessment was revised by Colonel Wace: an increase of 36 per cent. in Kotgarh and Kot Khai and 20 per cent. in Bharauli was taken, while the assessment of Simla was maintained. The people are prosperous and well-to-do, and the revenue easily paid. The demand in 1903-04, including cesses, came to Rs. 21,000. The average size of a proprietary holding is 1.2 acres.

The total collections of revenue and those of land revenue alone are shown below, in thousands of rupees:—

	1880 81 .	1890 pr.	1900-01.	1902-03.
Land Revenue	14,	17.	42,	171
Total Revenue	1,44,	1,77,	4,07,	3.77

SIMLA is the only municipality in the District, though the SIMLA Deputy Commissioner exercises the functions of a municipal DISTRICT. committee in KASUMPTI and those of a District board through- Local and out the District. The income of the District fund, derived mainly Municipal. from a local rate of Rs. 9-5-4 per cent. on the revenue, except in parganas Simla and Kotgūru where the rate is Rs. 8-5-4. amounted in 1903-04 to Rs. 2,767, and the expenditure to Rs. 1,971, more than half being devoted to education.

The regular police force consists of 315 of all ranks, of Police and whom II are cantonment and 128 municipal police and is Jails. under a Superintendent who is usually assisted by 2 Inspectors. There are 3 police stations and 1 outpost. The District jail at head-quarters has accommodation for 44 male and 12 female prisoners.

The District stands first among the 28 Districts of the Education. Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 17.4 per cent. (22.2 males and 8.5 females). The number of pupils under instruction was in 1880-81, 827, in 1900-01, 2,077, and in 1903 04, 1,881. In the last year the District possessed 12 secondary, 16 primary public schools and 10 elementary private schools, there being 492 female scholars in the public and 42 in the private schools. Most of these are in SIMLA itself. The Lawrence Asylum at Sanāwar, founded in 1847 by Sir Henry Lawrence for the children of European soldiers, and now containing some 450 boys and girls, is supported by the Government of India. The total expenditure in 1903-4 on education in the District was 3'7 lakhs, 1'6 lakhs coming from Provincial revenues and 1.1 lakhs from fees.

Besides the Ripon Hospital and the Walker Hospital in Hospitals and Simla town, the District has one out-lying dispensary at Kot Dispensaries. Khai. During 1904 these three institutions treated a total of 26,032 out-patients and 1,365 in-patients, and 2,399 operations were performed. Rs. 68,000 were spent during the year, derived almost entirely from municipal funds and sale of securities.

The number of successful vaccinations in 1903-04 was Vaccination. 641, representing 18 per thousand of the population. Vaccination is compulsory in Simla.

[D. C. J. Ibbetson, Gazetteer, 1883-84 (under revision); E. G. Wace, Seitlement Report, 1884; H. F. Blanford, The Silver Ferns of Simla and their allies, 1886; Sir H. Collett, Flora Simlensis, 1902; E. J. Buck, Simla, Past and Present, 1904.

Simla-cum-Bharauli—These two isolated tracts form a sub-tahsil of the Simla District, Punjab, lying between 30° 58' SIMLA DISTRICT. and 31° 8′ N. and 77° 1′ and 77° 15′ E., with an area of 25 square miles. They are bounded on all sides by the Simla Hill States. Their population was 29,668 in 1901, compared with 25,405 in 1891. SIMLA (population 13,960), is the sub-tahsil head-quarters, and it contains 35 villages. The land revenue and cesses amounted in 1903-04 to Rs. 7,000. The sub-tahsil lies entirely in the hills.

Kot Khai-cum-Kotgarh (Kotguru).—These two tracts form a sub-tahsil of the Simla District, Punjab, lying between 31° 4′ and 31° 22′ N. and 77° 29′ and 77° 43′ E., with an area of 52 square miles. It is bounded on all sides by the Simla Hill States. The population was 10,683 in 1901, compared with 11,581 in 1891. Kot Khai is the sub-tahsil head-quarters. It contains 10 villages, and the land revenue and cesses amounted in 1903-04 to Rs. 14,000. The sub-tahsil lies entirely in the hills, which, in Kot Khai especially, are covered with forests. Kotgarh lies on a spur of the Hātu range overlooking the Sutlej.

Dagshai.—A hill cantonment in the Simla District, Punjab, situated in 30° 53′ N. and 77° 4′ E., overlooking the cart road from Kālka to Simla, and 40.4 miles from the latter station. The land was given in 1847 by the Mahārājā of Patiāla. Dagshai is the head-quarters of a British infantry regiment, and a detachment of British infantry from the Ambāla garrison is quartered there during the summer months. Population (March 1901) 2,159.

Jutogh.—A hill cantonment in the Simla District, Punjab, situated in 31° 7′ N. and 77° 7′ E., about a mile from the western extremity of the station of Simla. The land was acquired from Patiala in 1843. During the summer months two batteries of British mountain artillery, and two companies of the regiment quartered at SABATHU are stationed here. Population (March 1901) 375.

Kasumpti.—A suburb of Simla station, Punjab. It lies within the territory of the Rājā of KEONTHAL, but being practically part of Simla was leased from the Rājā in 1884, and constituted a separate municipality, whose functions are performed by the Deputy Commissioner of Simla. The average municipal income and expenditure for the ten years ending 1902-03 were Rs. 5,600. Its income in 1903-04 was Rs. 6,200, chiefly from taxes on houses and lands, and its expenditure Rs. 6,300. Population (March 1901) 170.

Sabāthu (Subāthu).—Hill cantonment in Simla District, Punjab, situated in 30° 59' N. and 77° o' E., on a table-land at the extremity of the Simla range, overlooking the Ghambar river. It lies above the old road from Kālka to Simla, 9 miles from Kasauli and 23 from Simla station. Sabāthu has been held as a military post since the close of the Gurkha war in 1816, and is the head-quarters of a British infantry regiment. There is a small fort above the parade-ground, formerly of military importance, now used as a store-room. The American Presbyterian Mission maintains a school, and an asylum for lepers supported by voluntary contributions. Elevation above sealevel, 4,500 feet. Population (1901) 2,177.

SIMLA DISTRICT.

Simla Town—Head-quarters of the Simla District, Punjab, and summer capital of the Government of India, situated on a transverse spur of the central Himālayan system in 31° 6′ N. and 77° 10′ E., at a mean elevation above sea-level of 7,084 feet. It is distant by rail from Calcutta 1,1†6 miles, from Bombay 1,112 miles, and from Karāchi 947 miles; from Kālka, at the foot of the hills, by cart road, 58 miles. The population of the town (excluding Jutogh and Kasumpti) was: 1881, 12,305; in 1891, 13,034; 1901, 13,960, enumerated in February or March when it was at its lowest. At a municipal census taken in 1904 the population within the municipal limits was returned at 35,250. Of the population enumerated in 1901, Hindūs numbered 8,563, Muhammadans 3,545, Sikhs 346, Christians 1,471, and Jains and Zoroastrians 35.

A tract of land, including part of the hill now crowned by the station, was retained by the British Government at the close of the Gurkha war in 1815-16. Lieutenant Ross, Assistant Political Agent for the Hill States, erected the first residence, a thatched wooden cottage, in 1819. Three years afterwards, his successor, Lieutenant Kennedy, built a permanent house. Officers from Amba'a and neighbouring stations quickly followed the example, and in 1825 the new settlement had acquired a name. A year later, Lord Amherst, the Governor-General, after completing his progress through the north-west, on the conclusion of the successful Bharatpur campaign, spent the summer at Simla, From that date the sanitarium rose rapidly into favour with the European population of Northern India. Year after year, irregularly at first, but as a matter of course after a few seasons, the seat of Government was transferred for a few weeks in every summer from the heat of Calcutta to the cool climate of the Himālayas. Successive Governors-General resorted with increasing regularity to Simla during the hot weather. Situated in the recently annexed Punjab, it formed an advantageous spot for receiving the great chiefs of Northern and Western India, numbers of whom annually SIMLA DISTRICT,

SIMLA DISTRIC come to Simla to pay their respects. It also presented greater conveniences as a starting point for the Governor-General's cold weather tour than Calcutta. At first only as small staff of officials accompanied the Governor-General to. Simla; but since the administration of Lord Lawrence (1864). Simla has, except in 1874, the year of famine in Bengal, been the summer capital of the Government of India, with its secretariats and head-quarters establishments.

Simla was the regular head-quarters of the Commander-in-Chief before it was that of the Governor-General, and nowseveral of the Army Head-quarter offices remain in Simla allthe year round. The Punjab Government first came to Simla in 1871, and except for a three years' sojourn at Murree from 1873 to 1875 has had its summer head-quarters at Simla eversince.

Under these circumstances, the station has grown with extraordinary rapidity. From 30 houses in 1830 it increased to upwards of 100 in 1841 and 290 in 1866. In February 1881. the number of occupied houses was 1,141 and in March 1901 1,847 (including Kasumpti). Schemes for extending the station are under consideration. At present, the bungalows extend over the whole length of a considerable ridge, which runs east and west in a crescent shape, with its concave side pointing southward. The extreme ends of the station lie at a distance of 6 miles from one another. Eastward, the ridge culminates in the peak of Jakko, over 8,000 feet in height, and nearly 1,000 feet above the average elevation of the station. Woods of decdar, oak and rhododendron clothe its sides, while a tolerably level road, 5 miles long, runs round its base. Another grassy height, known as Prospect Hill, of inferior elevation to Jakko, and devoid of timber, closes the western extremity of the crescent. The houses cluster thickest upon the southern slopes of Jakko, and of two other hills lying near the western end, one of which, known as Observatory Hill, is crowned by Viceregal Lodge. The church stands at the western: base of Jakko, below which, on the south side of the hill, the native town cuts off one end of the station from the other. The eastern portion bears the name of Chota Simla, while the most western extremity is known as Boileauganj. A beautiful northern spur, running at right-angles to the main ridge, and still clothed with oak and old rhododendron trees, has acquired the complimentary designation of Elysium. Not far from the western end, two batteries of artillery occupy the detached hill of Jutogh. The exquisite scenery of the neighbourhood has been described in the article on SIMLA DISTRICT:

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SINLA DISTRICT

Simla, besides being the summer head-quarters of the Governments of India and of the Punjab, and of the various Departments of Army Head-quarters is the head-quarters of the Deputy Conservator of Forests, Simla division, and the Executive Engineer, Simla division, as well as of the ordinary District staff, and the summer head-quarters of the Commissioner of the Delhi Division. A battalion of Volunteers, the 2nd Punjab (Simla) Rifles, is stationed here. There are four. churches of the Church of England: - Christ Church (the Station Church) opened in 1844, a chapel of ease at Boileaugani, a chapel attached to Bishop Cotton School, and a native church in the bazar. There are also a Roman Catholic Cathedral and two Convents, and an Undenominational Church following the Presbyterian form of worship. The Church Missionary Society, Society for the Propagation of the Gospel, Zanana Mission and Baptist Mission have branches in the town. There are two Masonic Lodges. Simla also contains the United Service Institution of India, and a large club. The Government offices are for the most part accommodated in large blocks of buildings, and a town hall contains a theatre, reading room and ball room. Annandale, the Simla cricket ground and race-course, has recently been greatly enlarged. The municipality was created in 1850. The average income for the 10 years ending 1902-03 was 4.2 lakhs, the chief source being taxes, and the expenditure 41 lakhs. Its income in 1903 04 was 55 lakhs, chiefly derived from octroi, 1.7 lakhs, taxes on houses and lands, 1'3 lakhs, municipal property and fines, &c., Rs. 51,000, and Foans from Government, Rs. 39,000: The expenditure of 5.4 lakhs included, general administration, Rs. 57,000, watersupply, Rs. 89,000, conservancy, Rs. 33,000, hospitals and dispensaries Rs. 36,000, public safety, Rs. 37,000, public works, is lakh, interest on loans, 53,000, and repayment of loans, Rs. 64,0 o. Water is supplied to the station by a system of water-works constructed at a cost of about 6 lakhs and supposed to be capable of supplying a minimum of 300,000 gallons a day. The supply is not, however, sufficient for the rapidly growing needs of the town. A drainage system is now being extended at the cost of nearly 6 lakhs. The consolidated municipal debt amounts to about 12 lakhs.

The commerce of Simla consists chiefly in the supply of necessaries to the summer visitors and their dependants, but the town is also an *entrepôt* for the trade with China and Tibet mentioned in the article on SIMLA District. There are a large number of European shops, and four banks. The chief exports of the town are beer and spirits, there being two breweries and one distillery.

SIMLA DISTRICT. The chief educational institutions are Bishop Cotton School, a public school for European boys founded by Bishop Cotton in 1866 in thanksgiving for the deliverance of the British in India during the Mutiny of 1857; the Auckland High School for girls; the Christ Church Day Schools for boys and girls; two Convent Schools and a Convent Orphanage; the Mayo Orphanage for European and Eurasian orphan girls; and a municipal high school. The two chief medical institutions are the Ripon and Walker Hospitals, the latter founded in 1902 through the munificence of Sir James Walker, C.I.E., as a hospital for Europeans.

Solon—Hill cantonment in Simla District, Punjab, situated in 30° 55′ N. and 77° 7′ E., on the southern slope of the Krol mountain, on the cart road between Kālka and Simla, 30 miles from the latter station. Ground was acquired for a rifle range in 1863-64, and barracks were afterwards erected. Solon is the head-quarters of a British infantry regiment during the hot weather. Population (1901) 61.

Cross-references (for Imperial Gazetteer only.)

Azamābād-i-Talāwari.--Village in Karnāl District Punjab. See Tirawari.

Baroda.—A village in the Gohāna tahsīl of the Rohtak District, Punjab. See BARAUDA.

Bharauli.—Pargana of the sub-tahsil of SIMLA-cum-BHA-RAULI, Simla District, Punjab.

Bhawani.—Tahsil and town, Hissar District, Punjab. See Bhiwani.

Būria — A town in the Jagādhri tahsīl Ambāla District, Punjab. See BURIYA.

Dehli.—A Division, District, tahsil and city in the Delhi Division, Punjab. See DELHI.

Farukhnagar.—A town in the Gurgaon tahsil and District, Punjab. See FARRUKHNAGAR.

Fatehābād. - Tahsīl and town, Hissār District, Punjab. See FATAHABAD.

Jahāzgarh.—A village in Jhajjar tahsīl, Rohtak District, Punjab. See GEORGEGARH.

Kotgarh.—Pargana of the sub-tahsil of Kot Khai-cum-Kotgarh, Simla District, Punjab.

Mahim.—A town in the Rohtak tahsil and District. SINLA Punjab. See MAHAM.

Mandlana.—A village in the Gohana tahsil of the Rohtak District. Punjab, See MUNDLANA.

Noh.—Tahsil of the Gurgaon District, Punjab. See Nuh Tahsil.

Pehoa.—An ancient town in the Karnāl District, Punjab. See Pehowa.

Pihewa.—An ancient town in the Karnāl District, Punjab. See Pehowa.

Riwari.—Tahsil and town in the Gurgaon District, Punjab. See REWARI.

Subāthu.—Hill cantonment in the Simla District, Punjab. See Sabathu.

Sonāh.—A town in the Gurgaon tahsil and District. Punjab. See SOHNA.

Sonpat.—A tahsil and town in the Delhi District, Punjab See SONEPAT.

Thaneswar.—Tahsil and town of the Karnal District, Punjab. See THANESAR.

Umbālla.—A District, tahsīl and town in the Deihi Division, Punjab. See AMBALA.

